

July 23, 2015

**VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

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*Attorneys for Occidental Oil & Gas Corporation  
and California Resources Corporation*

Re: Notice of Violation of Safe Drinking Water Act and Notice of Intent to File Suit

To Whom It May Concern:

The Committee to Protect Our Agricultural Water and Mike Hopkins (collectively, "Plaintiffs") write to put Occidental Petroleum Corporation, Occidental Oil & Gas Corporation, Oxy U.S.A. Inc., California Resources Corporation, California Resources Elk Hills, LLC, California Resources Petroleum Corporation, and California Resources Production Corporation (collectively, "Occidental") on notice, pursuant to 40 C.F.R § 135.12(a) and 42 U.S.C. § 300j-8(b) that Occidental has violated 42 U.S.C. § 300h-1 of the Safe Drinking Water Act.

Plaintiffs allege, on information and belief, that the well information published by California Department of Conservation, Division of Oil, Gas, and Geothermal Resources ("DOGGR") is alarmingly outdated, and does not reflect the recent corporate reorganization of property owned by Occidental Petroleum Corporation and its numerous subsidiaries. Specifically, wells identified by DOGGR as operated by Vintage Production California, LLC, are operated by California Resources Corporation, a subsidiary of Occidental Petroleum Corporation that was "spun-off" on December 1, 2014. Similarly, among other instances of this phenomenon, wells identified by DOGGR as operated by Occidental of Elk Hills, Inc., are operated by California Resources Corporation, through its various subsidiaries, including California Resources Elk Hills, LLC.

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R. Rex Parris | Robert A. Parris | Alexander R. Wheeler | Jason P. Fowler | Bruce L. Schechter  
Kitty K. Szeto | Patricia K. Oliver | Ryan K. Kahl | Breanna L. Kenyon | John M. Bickford | Jacob L. Karczewski  
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Plaintiffs further allege, on information and belief, that Occidental has failed to comply with the Underground Injection Control regulations found in Title 14, California Code of Regulations, sections 1724.7, 1724.10(h-j) regarding the operation of numerous injection wells. Accordingly, Plaintiffs hereby provide notice of their intent to bring a civil action to enforce the Safe Drinking Water Act pursuant to 42 U.S.C. § 300j-8.

42 U.S.C. § 147.250 of the Safe Drinking Water Act incorporates by reference 14 CCR §§ 1724.7, 1724.10(h-j). Therefore, the Safe Drinking Water Act (“SDWA”) requires California operators to comply with these regulations.

14 CCR § 1724.10(h) states:

“Data shall be maintained to show performance of the project and to establish **that no damage to life, health, property, or natural resources is occurring by reason of the project. Injection shall be stopped if there is evidence of such damage**, or loss of hydrocarbons, or upon written notice from the Division. Project data shall be available for periodic inspection by Division personnel” (emphasis added).

Therefore, Occidental has a duty pursuant to the SDWA to stop injection if there is evidence of damage to ground water or drinking water supplies.

The United States Environmental Protection Agency (“US EPA”), the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (“DOGGR”), and the California State Water Resources Control Board (“SWRCB”) DOGGR have provided evidence of damage to underground waters suitable for irrigation or domestic purposes by the infiltration of, or the addition of, oilfield wastewater from underground injection activity. On July 18, 2011, DOGGR was publicly put on notice that injection wells in California were potentially endangering underground sources of drinking water. See Attachment 1, July 18, 2011 Letter from David Albright of US EPA, Region 9 to Elena Miller, former State Oil and Gas Supervisor, discussing DOGGR UIC program deficiencies.

On July 14, 2014, the US EPA ordered DOGGR to perform an extensive review of its UIC well program to prevent damage to underground sources of drinking water, resulting from the recent reviews of California aquifer exemptions and DOGGR’s UIC permitting processes. See Attachment 2, 2012 EPA Review of Aquifer Exemptions in California; Attachment 3, July 17, 2014 Letter from Jared Blumenfeld, Regional Director of US EPA – Region 9, pp. 2-3; Attachment 4, December 22, 2014 Letter from Jane Diamond of US EPA outlining steps to prevent damage to sources of drinking water.

On May 15, 2015, DOGGR and SWRCB reported to US EPA that hundreds of active injection wells “are potentially impacting water supply wells” by injecting into non-exempt aquifers with less than 3,000 mg/l total dissolved solids (“TDS”), or are injecting into non-

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exempt aquifers with between 3,000 and 10,000 TDS that can “reasonably be expected to supply a public water system.” See Attachment 5, DOGGR and SWRCB Letter to US EPA (some attachments omitted). 130 of the wells specifically identified by DOGGR and SWRCB are operated by Occidental. See Attachment 6, Occidental wells injecting into non-exempt aquifers with less than 3,000 TDS; Attachment 7, Occidental wells injecting into aquifers with between 3,000 and 10,000 TDS that “are reasonably be expected to supply a public water system”.

As one of the largest oil and gas well operators in California, it is likely that Occidental was aware of this evidence of damage to California drinking water even before DOGGR and SWRCB’s May 15, 2015 letter specifically identified Occidental’s wells. Occidental’s compliance with 14 CCR 1724.7 should have provided the same evidence of such damage relied upon by DOGGR and SWRCB in the May 15, 2015 letter. See 14 CCR 1724.7(a)-(c). However, Occidental continues to inject oilfield wastewater (and potentially “flowback fluid” from hydraulic fracturing) into these wells, despite the evidence of damage. The information contained in Attachments 6 and 7 (such as API numbers and recent injection volumes) provides notice of the specific activities, locations, and dates of the continuing violations of the SDWA.

Further, Plaintiffs allege Occidental failed to comply with 14 C.C.R. §§ 1724.7, 1724.10(i)-(j), including:

- 14 C.C.R. 1724.7(a), which requires an engineering study, including but not limited to:
  - (1) Statement of primary purpose of the project.
  - (2) Reservoir characteristics of each injection zone, such as porosity, permeability, average thickness, areal extent, fracture gradient, original and present temperature and pressure, and original and residual oil, gas, and water saturations.
  - (3) Reservoir fluid data for each injection zone, such as oil gravity and viscosity, water quality, and specific gravity of gas.
  - (4) Casing diagrams, including cement plugs, and actual or calculated cement fill behind casing, of all idle, plugged and abandoned, or deeper-zone producing wells within the area affected by the project, and evidence that plugged and abandoned wells in the area will not have an adverse effect on the project or cause damage to life, health, property, or natural resources.
  - (5) The planned well-drilling and plugging and abandonment program to complete the project, including a flood-pattern map showing all injection, production, and plugged and abandoned wells, and unit boundaries.
- 14 C.C.R. § 1724.7(b), which requires a geological study that includes, but is not limited to:
  - (1) Structural contour map drawn on a geologic marker at or near the top of each injection zone in the project area.

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- (2) Isopachous map of each injection zone or subzone in the project area.
  - (3) At least one geologic cross section through at least one injection well in the project area.
  - (4) Representative electric log to a depth below the deepest producing zone (if not already shown on the cross section), identifying all geologic units, formations, freshwater aquifers, and oil or gas zones.
- 14 C.C.R. § 1724.7(c), which requires an injection plan which includes, but is not limited to:
    - (1) A map showing injection facilities.
    - (2) Maximum anticipated surface injection pressure (pump pressure) and daily rate of injection, by well.
    - (3) Monitoring system or method to be utilized to ensure that no damage is occurring and that the injection fluid is confined to the intended zone or zones of injection.
    - (4) Method of injection.
    - (5) List of proposed cathodic protection measures for plant, lines, and wells, if such measures are warranted.
    - (6) Treatment of water to be injected.
    - (7) Source and analysis of the injection liquid.
    - (8) Location and depth of each water-source well that will be used in conjunction with the project.

- 14 C.C.R. § 1724.10(i), which states:

To determine the maximum allowable surface injection pressure, a step-rate test shall be conducted prior to sustained liquid injection. Test pressure shall be from hydrostatic to the pressure required to fracture the injection zone or the proposed injection pressure, whichever occurs first. Maximum allowable surface injection pressure shall be less than the fracture pressure. The appropriate district office shall be notified prior to conducting the test so that it may be witnessed by a Division inspector. The district deputy may waive or modify the requirement for a step-rate test if he or she determines that surface injection pressure for a particular well will be maintained considerably below the estimated pressure required to fracture the zone of injection.

- 14 C.C.R. § 1724.10(j), which states:

A mechanical integrity test (MIT) must be performed on all injection wells to ensure the injected fluid is confined to the approved zone or zones. An MIT shall consist of a two-part demonstration as provided in subsections (j)(1) and (2).

- (1) Prior to commencing injection operations, each injection well must pass a pressure test of the casing-tubing annulus to determine the absence of

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- leaks. Thereafter, the annulus of each well must be tested at least once every five years; prior to recommencing injection operations following the repositioning or replacement of downhole equipment; or whenever requested by the appropriate Division district deputy.
- (2) When required by subsection (j) above, injection wells shall pass a second demonstration of mechanical integrity. The second test of a two-part MIT shall demonstrate that there is no fluid migration behind the casing, tubing, or packer.
  - (3) The second part of the MIT must be performed within three (3) months after injection has commenced. Thereafter, water-disposal wells shall be tested at least once each year; waterflood wells shall be tested at least once every two years; and steamflood wells shall be tested at least once every five years. Such testing for mechanical integrity shall also be performed following any significant anomalous rate or pressure change, or whenever requested by the appropriate Division district deputy. The MIT schedule may be modified by the district deputy if supported by evidence documenting good cause.
  - (4) The appropriate district office shall be notified before such tests/surveys are made, as a Division inspector may witness the operations. Copies of surveys and test results shall be submitted to the Division within 60 days.

Plaintiffs allege, on information and belief, that Occidental operated injection wells without full compliance with the applicable standards set forth above in 14 CCR §1724.7 or 14 CCR 1724.10(i)-(j). Furthermore, Occidental knowingly injected and continues to inject oilfield waste into sources of California drinking water since at least May 15, 2015 to the present, in violation of 14 CCR § 1724.10(h).

Plaintiffs bringing this notice can be reached through their Counsel, R. Rex Parris Law Firm located at 43364 10<sup>th</sup> Street West, Lancaster, California 93534, (661) 949-2595.

Sincerely,



Ethan T. Litney  
R. Rex Parris Law Firm  
Attorneys for Committee to Protect  
Our Agricultural Water and Mike  
Hopkins

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Notice of Violation of Safe Drinking Water Act and Notice of Intent to File Suit

July 23, 2015

Page | 6

cc: Administrator, US EPA  
Regional Administrator, US EPA, Region 9  
Director, California Department of Conservation  
California State Oil and Gas Supervisor  
California Attorney General  
Occidental Petroleum Corporation  
Occidental Oil and Gas Corporation  
Oxy U.S.A Inc.  
California Resources Corporation  
California Resources Elk Hills, LLC  
California Resources Petroleum Corporation  
California Resources Production Corporation  
CT Corporation System – Registered Agent for:  
    Occidental Petroleum Corporation  
    Occidental Oil and Gas Corporation  
    Oxy U.S.A Inc.  
    California Resources Corporation  
    California Resources Elk Hills, LLC  
    California Resources Petroleum Corporation  
    California Resources Production Corporation

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# ATTACHMENT 1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

July 18, 2011

Elena Miller  
State Oil and Gas Supervisor  
Department of Conservation  
Division of Oil, Gas and Geothermal Resources  
801 K Street, MS 20-20  
Sacramento, CA 95814-3530

Dear Ms. Miller:

I am pleased to transmit to you a copy of the California Class II Underground Injection Control (UIC) Program Review final report (Final Report) dated June 2011 and EPA's findings and recommendations. As you know, EPA utilized a contract with the Horsley Witten Group to conduct an evaluation of California's implementation of the Class II UIC primacy program. The goals of this program evaluation were to review how the California Division of Oil, Gas, and Geothermal Resources (DOGGR) oversees and manages the permitting, drilling, operation, maintenance and plugging/abandonment of Class II UIC wells in the State, and identify program implementation recommendations. The Final Report incorporates additional material that was provided to EPA in early June 2011 from your staff.

EPA supports the recommendations that are listed in Section 5.0 Recommendations in the Final Report. I anticipate that some of the recommendations may require state regulatory revisions and others can be addressed through procedural clarifications and modifications. In particular, I want to highlight the following program deficiencies that require more immediate attention and resolution:

- **Federal Definition and Protection of Underground Source of Drinking Water (USDW):** DOGGR UIC regulations and primacy documents do not clearly require the District Offices to protect USDWs to the federally-defined standard of 10,000 mg/L total dissolved solids (TDS) in the permitting, construction, operation, and abandonment of Class II injection wells. Protection of potential drinking water sources which fall between TDS levels of 3,500 mg/L – the level recognized by the State's regulations as "fresh water" – and 10,000 mg/L is essential for DOGGR to demonstrate as a federal UIC primacy agency.
- **Zone of Endangering Influence (ZEI) and Area of Review (AOR):** EPA's review found that ZEI determinations are not being performed for injection wells throughout the state and AOR analyses are based almost exclusively on a fixed quarter-mile radius approach. Whereas the fixed radius approach may be appropriate for some injection wells, there are others where this approach will not adequately capture the

full extent of pressure influences from the injection activity (i.e., the ZEI, if calculated, would exceed a quarter-mile radius around the well) and will require an expanded AOR.

**Step Rate Tests/Maximum Allowable Surface Pressure:** Both California and federal UIC regulations mandate that maximum surface injection pressure must be lower than the fracture pressure of the injection zone. However, EPA's review found that for most Class II injection wells and well fields overseen by DOGGR, the fracture pressure of the injection zone is determined by an estimate of the formation fracture gradient, rather than from a well or field/formation-specific step-rate test (SRT) that would yield a more accurate measurement of fracture pressure. Moreover, even in instances where a SRT was performed, DOGGR allowed operators to use only surface pressure measurements, rather than the more accurate combination of surface and bottom-hole measurement.

Additionally, the final report includes recommendations for DOGGR to ensure that the State's Class II UIC program meets all federal requirements. These recommendations request clarification, improved procedures, and consistent standardized implementation pertaining to several areas including UIC Staff Qualifications; Annual Project Reviews; Mechanical Integrity Surveys and Testing; Inspections and Compliance/Enforcement Practices and Tools; Idle Well Planning and Testing Program; Financial Responsibility Requirements; and, Plugging and Abandonment Requirements.

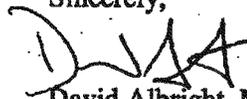
We request that you provide EPA with an action plan (Plan) that addresses the above noted deficiencies and other areas for improvement identified in the Final Report - Section 5.0 - Recommendations by September 1, 2011.

As part of the Horsley Witten Group's research and collection of materials to conduct the program evaluation, your staff provided an agency memorandum entitled Underground Injection Control (UIC) Program Expectations (Expectations Memo), signed by you and dated May 20, 2010. This memo addresses some of the program deficiencies discussed in EPA's Final Report and noted in Section 5.0 - Recommendations. Please include in the Plan a discussion of the Expectations Memo and the status of this document in relation to the EPA-approved DOGGR Class II UIC Program.

Additionally, after review of the Final Report my staff realized that a discussion of DOGGR's permitting and oversight procedures for Class II slurry-fracture injection was not included in the questionnaire which the Horsley Witten Group used to collect information for this program review, due to EPA's error. As we are still interested in this topic, my staff plans to reach out to each of the District Offices to learn more about Class II applications of slurry-fracture injection in California. Also, we are interested in following up with the appropriate District Offices on any outstanding material which the Final Report identifies, including the limited use of compressed bentonite for plugging and abandonment procedures in District 4.

We look forward to any feedback you have on the Final Report and the submittal of your Plan to address the recommendations for program improvement. Once again, I wish to extend my sincere thanks to you and your staff for supporting this effort, and for the cooperation and resources all six District Offices provided to the Horsley Witten Group in responding to the Questionnaires, hosting site visits, and conducting follow-up as requested.

Sincerely,



David Albright, Manager  
Ground Water Office

Enclosure

cc: Rob Habel, Deputy Oil and Gas Supervisor  
District Deputies, Districts 1-6

# ATTACHMENT 2

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Enclosure

Review of Aquifer Exemptions in California  
DRAFT Preliminary Findings

[Transmitted via email on May 11, 2012 from David Albright, Manager, Ground Water Office, USEPA Region 9 to Rob Habel, DOGGR with cc to Tim Kustic, DOGGR]

## Review of Aquifer Exemptions in California

### DRAFT Preliminary Findings

#### Introduction

The California Division of Oil and Gas, in 1991 to also include Geothermal Resources (DOGGR) requested aquifer exemptions as part of the "Application for Primacy in the Regulation of Class II Injection Wells Under Section 1425 of the Safe Drinking Water Act" (the primacy application) dated April 1981. The specific exemptions requested are described in Appendix B of the primacy application.

#### Descriptions of the Exempt Aquifers

##### **The Primacy Application**

The aquifer exemptions requested by DOGGR in the April 1981 primacy application fall into three categories. These categories were not specifically proposed by DOGGR; they are used in this paper for organizational clarity only. The three categories are as follows:

##### Category 1.

The hydrocarbon producing aquifers shown in Volumes I and II of "California Oil and Gas Fields" (the report), published by the California Division of Oil and Gas (dated 1973 and 1974, respectively) were included with the primacy application. The formations or portions thereof that were requested to be exempt are described and depicted as the shaded portions on the maps and cross sections of the report. The report's "Introduction" further describes these shaded areas as the producing zones.

##### Category 2.

For the oil and gas fields discovered after December 1973, a separate list of the thirty-seven (37) formations requested to be exempt were included in Appendix B, Table 2 of the primacy application. It should be noted that several of these formations/zones are named as "confidential". The primacy application did not include any maps of these 37 formations, only the location of the discovery well, and the range of depths of the producing intervals. However, some of these fields/formations (25 of the 37) are depicted in Volume III of the report, dated 1981. Volume III is an updated version of the Northern California portion of Volume I, and appears to have been published after DOGGR submitted their April 1981 primacy application, but prior to EPA's granting of primacy in 1982.

### Category 3.

Non-hydrocarbon producing aquifers requested for exemption were listed in Appendix B, Table I of the primacy application. The list includes 87 formations/zones in various fields in Districts 1-6, and each of the field boundaries are depicted on the maps included in Appendix B, following Table I.

### Additional Comment

The current DOGGR website provides a hyperlink to the April 1981 primacy application. The website also contains a statement suggesting that the approved aquifer exemptions are those contained in the 1981 primacy application.

### **The Memorandum of Agreement (MOA)**

Aquifer exemptions were formally approved by EPA as discussed in Section H and described in Attachment 2 of the "Underground Injection Control Program Memorandum of Agreement Between California Division of Oil and Gas and the United States Environmental Protection Agency Region 9" (the MOA) signed by DOGGR and EPA in September 1982, as part of the Class II UIC primacy approval process. This MOA is referenced in 40 CFR Part 147 as one of the official program documents associated with EPA's approval of the California Class II UIC program. The MOA documents which aquifers EPA exempted (refer to the copy of Attachment 2 of the MOA, attached).

### Analysis

EPA has completed a review, based on the records we have, of the aquifer exemption determination process that was conducted, in order to clarify and confirm which aquifers were exempted.

### Category I.

The 1981 primacy application requested the exemption of all the oil and gas producing formations included in Volume I and II of the report. Volume I includes the oil and gas fields of North and East Central California, dated 1973. Volume I has been updated since 1973, the most current version is dated 1998. Volume II includes South, Central Coastal and Offshore California, dated 1974. Volume II has also been updated, the most current version is dated 1991.

Attachment 2 of the MOA states that "all oil and gas producing aquifers identified in Volumes I, II and III" of the report are exempt (see attached). Section H. of the MOA formally incorporated Attachment 2 into the MOA. As noted, Volume III is an updated version of the Northern California portion of Volume I, and is dated 1981. Although the month in 1981 is not specified, it is presumed to have been issued post April 1981, the

date of the primacy application. Volume III has also been updated, the most current version is dated 1998.

For the Category 1 formations in the MOA, EPA exempted all oil and gas producing zones that were included in the report, as follows: 1) 1973 version of Volume I; 2) 1974 version of Volume II; and 3) 1981 version of Volume III. As requested by DOGGR, the exempt portions of the aquifer are described and depicted as the shaded portions on the maps and cross sections of the report.

Category 2.

The MOA does not specifically name the 37 formations/zones from the post 1973 oil/gas producing fields proposed for exemption by DOGGR in their 1981 application (on Table 2). However, our current review noted that 25 of the 37 formations are included in the 1981 version of Volume III, thus the designated portions of those 25 producing formations are exempt. The 12 remaining formations were not included in any of the three volumes of the report (as of 1982, when EPA granted primacy and approved aquifer exemptions), thus they are presumed non exempt. However, ten (10) of the fields and their associated formations are depicted in updated versions of the report; either the 1998 version of Volume I, or the updated version of Volume II, dated 1991. The two (2) remaining formations are listed in the 1981 primacy application as "confidential" in the Harlan Ranch Gas and Howell's Pt. Gas fields, respectively, but are not included in any volumes of the report. The 12 formations are:

Field	Formation
Yowlumne	Stevens
Rio Viejo	Stevens
Turk Anticline	Temblor
Carneros Creek	Wygat
Moorpark West	Sespe
Temblor Hills	Agua
Temblor Hills	Pt. of Rocks
Careaga Canyon	Monterey
Cal Canal	Stevens
Westhaven	Temblor
Harlan Ranch Gas	Confidential
Howell's Point Gas	Confidential

### Category 3.

Attachment 2 of the MOA (attached) lists 20 (of the 87 originally proposed non-hydrocarbon producing formations from Table 1 of the primacy application) formations/zones in various fields in Districts 2-6 as exempt. One additional non-hydrocarbon producing formation, not proposed for exemption in Table 1 of the primacy application (and presumed to have been proposed separately) is confirmed as exempt on Attachment 2 of the MOA. Thus, EPA approved a total of 21 aquifer exemptions for non-hydrocarbon producing formations - 20 of the 87 originally requested, plus one additional formation not identified in the primacy application. The additional exempt formation is the "Santa Margarita Formation, Poso Field, District 4. Attachment 3 of the MOA lists 11 of the 87 originally proposed non-hydrocarbon producing formations/zones as not exempt.

The remaining 56 formations (of the 87 proposed in Table 1 of the primacy application) were not exempted by EPA. Based on the information contained in EPA's administrative records, it appears that most, if not all of these formations were determined to be non-USDWs and thus did not require exemption. DOGGR submitted a letter, dated March 1982, which provided TDS values for all 87 of the non-hydrocarbon producing formations proposed for exemption in the primacy application. Fifty-three (53) of those formations are listed in the March 1982 letter as having TDS levels greater than 10,000 ppm.

It is unclear why the remaining three formations from Table 2 of the primacy application (that had TDS values below 10,000 ppm) were not exempted by EPA. However, those three formations (Etchegoin Fm, Strand Field, District 4; Mokulemne Fm, Union Island Gas Field, District 6; and Capay Fm, River Break Gas Field, District 6) are not included in Attachment 2 of the MOA, and are therefore not exempt.

### Additional Findings

- Section H. of the MOA formally incorporated Attachments 2 and 3 into the MOA. Section H. also clarifies that the 11 aquifers in Attachment 3 "proposed for exemption in the 1425 demonstration and not exempted will be phased out within 18 months of the effective date of this Agreement (the MOA)". Since the MOA was signed in late September 1982, those 11 formations were not exempt as of April 1984.
  
- Section H. of the MOA also states the following: "Aquifers exempted by the Division and EPA under this Agreement shall only be applicable for the injection of fluids related to Class II activities defined in 40 CFR 146.05 (b).

## Summary

### Category 1.

All of the shaded portions of the oil and gas producing aquifers included in Volumes I, II and III of the report, dated 1973, 1974 and 1981 respectively, are exempt.

### Category 2.

25 of the 37 formations within the post 1973 fields included on Table 2 of the primacy application and depicted in Volume III of the report dated 1981 are exempt.

12 of the formations within the post 1973 fields included on Table 2 of the primacy application and not depicted in versions of the report incorporated in the MOA, are not exempt. Ten (10) of these 12 fields are depicted in subsequent versions of the report. The two remaining fields with "confidential" formation designations are found on the DOGGR website as producing fields, even though they are not depicted in any subsequent versions of the report.

### Category 3

21 non-hydrocarbon producing formations are exempt:

[20 of the 87 originally proposed non-hydrocarbon producing zones, and

1 additional non-hydrocarbon producing zone, the Santa Margarita Fm Poso Field]

All of the remaining non-hydrocarbon producing formations included in Table 1 of the primacy application were not exempted by EPA. Most (53) of these formations appear to have not been exempted because it was demonstrated that they are not USDWs (TDS levels > 10,000 ppm).

### Suggested Next Steps:

- DOGGR to review and comment on this document and provide any other relevant documents/materials for EPA consideration.
- Recommend DOGGR consider modifying current website regarding aquifer exemptions.
- If warranted, DOGGR to identify any additional aquifers, or portions of aquifers that they request EPA consider for exemption.

# ATTACHMENT 3



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 95105-3901

JUL 17 2014

OFFICE OF THE  
REGIONAL ADMINISTRATOR

Matt Rodriquez  
Secretary for Environmental Protection  
California Environmental Protection Agency  
1001 I Street  
P.O. Box 2815  
Sacramento, CA 95812-2815

John Laird  
Secretary  
California Natural Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95814

Dear Secretaries Rodriquez and Laird:

The Safe Drinking Water Act was passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supplies. The SDWA authorizes the United States Environmental Protection Agency to protect underground sources of drinking water. This role is of particular importance at this time of drought and diminished water supplies.

Since 1983, California's Division of Oil, Gas and Geothermal Resources has been granted primary responsibility from EPA to implement the requirements of the Safe Drinking Water Act's Underground Injection Control Program. The State's authority covers certain types of injection wells, used primarily to inject steam or water for enhanced oil/gas recovery, or to inject waste water (such as brines) from oil and gas production (Class II). EPA approves the locations where injection into groundwater aquifers may be allowed. These aquifers are generally those that are not used and have no use as potential sources of drinking water. Aquifers with high quality water are protected and should not receive Class II oil and gas related injection fluids.

EPA requires DOGGR to administer the State Program in accordance with approved statutes and regulations, including the requirements and procedures described in a Memorandum of Agreement between the EPA and DOGGR. In 2011, EPA conducted an audit of the State Program that highlighted specific deficiencies. Additionally, in 2012, EPA performed a preliminary review focused on aquifer exemptions, the results of which were shared with DOGGR (copy enclosed). The review raised questions about the alignment of Class II injection wells with approved aquifer exemption boundaries. DOGGR then initiated a broad review of Class II injection in the State to ensure that wells have been appropriately authorized to inject within the aquifer exemption boundaries approved by the EPA. After reviewing files for existing Class II well permits and GIS mapping of the wells in question, DOGGR determined that it had authorized some injection of oil and gas-related disposal fluids such as brines into non-exempt

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aquifers containing high quality water. Additionally, DOGGR identified the presence of water supply wells in the vicinity of some of the injection wells. On July 1, 2014, the State issued orders requiring the affected operators to cease injection in non-exempt, fresh water aquifers and to submit data needed to assess the potential threat to human health and potential impacts to water quality.

Exercising our authority under 40 C.F.R. § 145.32, EPA requests that DOGGR take the following actions and provide the following information to the EPA:

**1. Drinking Water Source Evaluation**

EPA requests that the State provide, within 60 days of receipt of this letter, its initial assessment of whether any existing and potential sources of drinking water are at risk of contamination from improper Class II injection, including the following:

- a. The location of private and public water system wells that may be at risk due to permitted Class II injection activities.
- b. A plan to ensure protection of human health from actual or potential exposure to drinking water affected by any injection wells.
- c. In coordination with the State Water Resources Control Board, Regional Water Quality Control Boards and the California Department of Public Health, a plan to communicate this information to the public and to address subsequent questions and concerns.

**2. Documentation of Aquifer Exemptions**

When EPA approved State primacy in 1983, EPA also approved a number of aquifer exemptions. Following up on our 2012 preliminary review, we are working to evaluate the historical records on aquifer exemptions. To facilitate our evaluation, EPA asks that DOGGR provide all documents that pertain to the State's requests for aquifer exemptions, EPA's approval or denial of such requests, and any post-primacy appeals by the State regarding aquifer exemptions. Please provide any information within 30 days of receipt of this letter.

**3. Tiered Review of Class II Wells**

Any injection from Class II wells into an aquifer that meets the definition of an underground source of drinking water (less than 10,000 mg/L total dissolved solids), absent an EPA-approved aquifer exemption, is inconsistent with UIC regulations and State Program primacy requirements. EPA understands the State is currently evaluating all potential Class II wells that may be injecting into underground sources of drinking water. EPA supports the State's plans to complete the review of all affected wells within the next several months, and to take responsive action to protect underground sources of drinking water, with priorities for review based on proximity to water supply wells and the potential that receiving formations may be in current use as sources of drinking water. Please provide the following:

- a. Within 30 days of receipt of this letter, the number and location of all Class II wells, by DOGGR district, permitted to inject in non-hydrocarbon-producing formations with water quality below 10,000 mg/l, total dissolved solids, other than the 25 formations listed in Attachment A to this letter. For each identified well, please include the operator's name, well type, depth, field and formation names, date injection commenced, the water quality (TDS) of both the injection formation and the injection fluid, and any other pertinent details. In addition, please provide any associated orders or actions to cease injection in such formations (excluding the seven orders dated July 1, 2014) and plans to ensure future protection of underground sources of drinking water.
- b. Within 90 days of receipt of this letter, the number and location of all Class II wells, by DOGGR district, permitted to inject in hydrocarbon-producing formations with water quality below 10,000 mg/L TDS located in non-exempt aquifers. For each identified well, please include the operator's name, well type, depth, field and formation names, date injection commenced, the water quality (TDS) of both the injection formation and the injection fluid, and any other pertinent details.
- c. Within 60 days of receipt of this letter, a plan and timeline for completion of a searchable database of all the Class II well information statewide (along with a GIS overlay of the injection wells, injection formations, and aquifer exemptions) and submission to EPA of any new or revised aquifer exemption requests, which the State determines are appropriate.

#### 4. State Program Consistency

On November 16, 2012, DOGGR provided an action plan to the EPA in response to the EPA's 2011 audit of the State Program's consistency with federal regulations. The action plan addresses the identified deficiencies, including clarification of the regulatory definition of underground sources of drinking water and improved procedures for well testing and aquifer analysis. Please provide, within 30 days of receipt of this letter, a status report on DOGGR's progress on this action plan (copy enclosed), along with a schedule for any plan revisions and for completing implementation of the action plan.

In conducting the ongoing program evaluation, EPA's goal is to ensure that the State's Program complies with all necessary requirements, is implemented in accordance with the approved Program, and provides the transparency necessary for facilitating EPA's oversight of the Program.

Thank you for your prompt attention and continued cooperation as we pursue resolution of these issues.

Sincerely,



Jared Blumenfeld

## Attachment and Enclosures

cc: Mark Nechodom, Director, California Department of Conservation  
Jason Marshall, Deputy Director, California Department of Conservation  
Bruce Reeves, Chief Counsel, California Department of Conservation  
Tom Howard, Executive Director, State Water Resources Control Board  
Jonathan Bishop, Chief Deputy Director, State Water Resources Control Board  
Pamela Creedon, Executive Officer, Regional Water Quality Control Board  
Clay Rodgers, Assistant Executive Officer, Regional Water Quality Control Board  
Mark Starr, Deputy Director, California Department of Public Health  
Steven Bohlen, Oil and Gas Supervisor, Division of Oil, Gas and Geothermal Resources  
California Department of Conservation

## ATTACHMENT A

EPA Approved Aquifer Exemption formations for which no information is requested:

<u>Field</u>	<u>Formation /Zone</u>
McCool Ranch	"D" Sand
Asphalto	Tulare
San Ardo	Continental
San Ardo	Aurignac
Ramona	Pico
Cat Mountain	Undifferentiated
Simi	Sespe
San Ardo	Santa Margarita
San Ardo	Monterey "D" Sand
San Ardo	Monterey "E" Sand
Monroe Swell	Santa Margarita
Buena Vista	Tulare
Kern Bluff	Vedder
Kern River	Vedder
Mountain View	Kern River
Pleito	Chanac
Pleito	Kern River
Poso Creek	Santa Margarita
Coalinga	Santa Margarita
Coalinga	Etchegoin-Jacalitos
Gujarral Hills	Etchegoin-Jacalitos*
Helm	Tulare-Kern River
Riverdale	Pliocene
Turk Anticline	San Joaquin
Sutter Buttes Gas	Kione*

- Oil and/or gas producing

# ATTACHMENT 4



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

December 22, 2014

Jonathan Bishop  
Chief Deputy Director  
California State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-0100

Steven Bohlen  
Oil and Gas Supervisor  
Division of Oil, Gas and Geothermal Resources  
California Department of Conservation  
801 K Street, MS 18-05  
Sacramento, CA 95814-3530

Dear Messrs. Bishop and Bohlen:

I am writing to follow up on EPA's July 17, 2014 letter to CalEPA and the Resources Agency regarding the State's administration of the federal Safe Drinking Water Act Class II Oil and Gas Underground Injection Control program. In that letter, we described serious deficiencies in California's Class II program and inconsistencies with federal UIC regulations and State Program primacy requirements. The letter also set forth comprehensive requirements and deadlines for the State to address the deficiencies and bring the program into compliance. Enclosed is a summary of the status of the State's responses to the July 17 letter.

Our frequent dialogue and your efforts in the last six months have illuminated the breadth and complexity of the challenges and the substantial workload faced by the State agencies in overcoming the program's deficiencies. The State's submittals and conceptual plans presented since July are a step in the right direction. However, a more definitive overall plan of State actions and milestones is critically needed by February 6, 2015, to bring the Class II program into compliance by February 15, 2017.

This letter highlights the main areas of recent discussion and provides direction for the State's submittal of a program revision plan by February 6, 2015. This plan should comprehensively address the results of EPA's 2011 audit and 2012 review, and any other related reviews available to the State; assure completion of the outstanding items listed in the enclosure; provide a detailed list of planned actions based on a two-year schedule of tiered priorities, specific deliverables, interim and final milestones; and identify the resources to be deployed to accomplish this work.

**Injection Well Evaluations:** Priority must be given to completing and submitting the review of existing Class II wells which may be injecting into non-exempt aquifers, particularly in non-hydrocarbon producing zones, as this is the critical path for evaluating the highest potential impacts to drinking water sources. The drinking water source evaluation for these wells should then proceed expeditiously, followed by appropriate actions to address any threats to drinking water (e.g., emergency orders to cease injection, permit rescission, information orders or exercise of other authorities).

Where injection for enhanced oil recovery or waste disposal is contemplated to continue via existing wells into aquifers without approved exemptions, or into portions of aquifers that are outside the specific areas exempted, the State needs to establish a process, priorities, and a schedule to evaluate and address any potential threats from these operations, and for timely development of aquifer exemption proposals. The schedule should reflect environmental and public health priorities and provide adequate time for public participation and for EPA to finalize any needed decisions on these aquifers over the course of the next two years, and no later February 15, 2017. The State must take actions to prohibit injections after February 15, 2017 in any aquifers for which EPA has not approved an aquifer exemption.

Further, State approval of any new wells in aquifers without approved exemptions or into portions of aquifers that are outside the specific area exempted should be limited to State-approved projects in hydrocarbon producing zones, and should include considerations such as: information from drinking water well surveys and recent water quality data in the vicinity of the injection wells; use of formations with greater than 3000 ppm TDS (as we understand the State is analyzing the conditions, if any, under which continued injection into hydrocarbon producing zones with water quality of less than 3000 ppm TDS should be permitted); use of compliance orders or exercise of comparable State authorities to compel operators' submittal of complete applications for aquifer exemptions, and to prohibit injections after February 15, 2017 in any aquifers for which EPA has not approved an aquifer exemption; availability of alternate disposal options; public review processes undertaken; and concurrence by DOC/DOGGR and State/Regional Boards. It is important to note that the State's granting of an authorization for an injection well prior to obtaining EPA's approval of an aquifer exemption does not guarantee EPA's approval, which will be based on regulatory criteria.

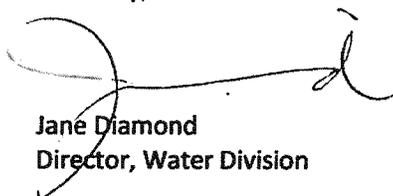
**Aquifer Exemption Process:** Aquifer exemptions are an essential component of the State's Class II well permitting program. The State must determine which aquifers to exempt, provide for public participation and submit proposed exemptions to EPA for approval. The State must support the proposed exemptions with strong technical data and robust evaluations before presenting them to the public and EPA. Given the multiple state agencies involved, explicit internal processes and procedures are needed to guide the gathering and thorough evaluation of the necessary data, and seek EPA approval regarding the specific aquifer exemptions. EPA's Aquifer Exemption Checklist, provided previously and again as an enclosure with this letter, outlines the requirements for aquifer exemptions. We also provided several examples and met with State staff on November 3, 2014 to discuss required documentation.

**Historic Aquifer Exemptions:** In addition to wells known to the State to be injecting into zones that do not have aquifer exemptions, some existing wells inject into 11 aquifers which have been historically treated as exempt, though data provided by the State to EPA with its 1981 primacy application indicate that these 11 aquifers were non-hydrocarbon producing and contained water that was less than 3000 ppm TDS. Pursuant to Section II(H) of the Underground Injection Control Program Memorandum of Agreement Between California Division of Oil and Gas and the United States Environmental Protection Agency, EPA believes the collection and consideration of current data on the water quality of these aquifers will afford the State the opportunity to determine whether existing wells in these aquifers should continue to operate. The State's program revision plan should outline performance of specific activities by the State and operators on a schedule that will allow EPA to finalize any needed decisions on these aquifers by December 31, 2016. No new wells should be authorized in an aquifer prior to the conclusion of this process for that aquifer.

EPA is committed to working with the State under 40 CFR 145.33 to enable the State to maintain primacy for the Class II Oil and Gas Underground Injection Control program. Given the need to resolve the program's serious deficiencies in a timely matter, EPA has strengthened oversight and support of the program. As part of this investment, EPA is prepared to re-direct a portion of the State's anticipated FY15 federal UIC grant allocation of approximately \$550,000 to specific efforts targeted to advance the State's Class II program toward compliance with the Safe Drinking Water Act. We will consult with you on work to be led by EPA with these funds.

We look forward to continuing our collective efforts towards achieving our shared commitment to protect California's underground sources of drinking water, and anticipate receiving your program revision plan by February 6, 2015.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jane Diamond', with a long horizontal flourish extending to the right.

Jane Diamond  
Director, Water Division

Enclosures

- (1) Status of State Response to EPA's July 17, 2014 letter
- (2) EPA Aquifer Exemption Checklist

# ATTACHMENT 5



DEPARTMENT OF CONSERVATION  
*Managing California's Working Lands*  
DIVISION OF OIL, GAS, & GEOTHERMAL RESOURCES



May 15, 2015

Mr. Michael Montgomery  
United States Environmental Protection Agency – Region IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Dear Mr. Montgomery:

As part of the approved plan to resolve compliance issues with California's program to regulate the injection of Class II fluids, the Division of Oil, Gas, and Geothermal Resources (Division) and the State Water Resources Control Board (State Water Board), on behalf of the State of California, have taken the following steps:

**1. Initiated emergency rulemaking to address injection into sub-10,000 milligrams per liter (mg/L) total dissolved solids (TDS), non-hydrocarbon producing zones.**

On April 2, 2015, the Department of Conservation issued public notice of its intent to adopt emergency regulations to codify the compliance deadlines discussed in previous correspondence between the US EPA and the State, and to establish minimum civil penalties for failure to comply with the compliance deadlines. These regulations were approved by California's Office of Administrative Law on April 20, 2015, and are now in effect.

Under the new regulation, injection into non-exempt, non-hydrocarbon aquifers containing less than 3,000 mg/L TDS must cease by October 15, 2015; injection into non-exempt, non-hydrocarbon-bearing aquifers containing 3,000 to 10,000 mg/L TDS must cease by February 15, 2017; and injection into the 11 specified aquifers must cease by December 31, 2016, absent determination by the US EPA that an aquifer meets the criteria for exemption. The Department is on schedule to initiate permanent rulemaking by June 1, 2015 as outlined in the approved plan. A copy of the regulations is enclosed herewith as Attachment A.

**2. Conducted further well evaluations.**

We are pleased to report that the Division and the State Water Board have completed their review of the Category 1 injection wells in accordance with EPA's letter dated March 9, 2015. Category 1 injection wells are those wells that were

Mr. Michael Montgomery  
May 15, 2015  
Page 2

permitted to inject Class II fluid for disposal purposes into non-exempt, non-hydrocarbon-bearing aquifers. The Division and the State Water Board also included in Category 1 those injection wells that were permitted to inject Class II fluid for disposal purposes into the 11 aquifers that have been historically treated as exempt.

The Division initially identified for EPA a total of 532 Category 1 injection wells, and are treating them in two groups, depending on the water in the zone of injection. The first group consists of 176 injection wells injecting into aquifers that are below a concentration of 3,000 mg/L TDS. (See table in Attachment B.) The second group consists of 356 injection wells injecting into aquifers that are above a concentration of 3,000 mg/L TDS. (These 356 wells, broken into three groups, are described in the tables at Attachments C, D and E.) All 532 of these injection wells have been further reviewed by the Division, and the Division has determined that 80 of the 532 injection wells do not meet the criteria for Category 1, as explained below.

*Disposition of the Group of 176 Category 1 Wells.* Of the 176 Category 1 injection wells that were initially identified to EPA as permitted to inject into aquifers that are at or below 3,000 mg/L TDS, the Division has determined that 21 did not meet the Category 1 criteria because they (a) were completed in an aquifer that has a TDS concentration above 10,000 mg/L so an exemption was not needed (1 injection well), (b) were never permitted (1 injection well), or (c) were completed in an aquifer that is exempt (19 injection wells).

The State Water Board has evaluated each of the remaining 155 injection wells in this group to determine whether the injection well has the potential to impact water supply wells. (The State Water Board staff considers an injection well that is injecting into an aquifer with a concentration at or below 3,000 mg/L TDS as having the potential to impact water supply wells if the injection zone is less than 1500 feet below ground surface, or the injection zone is within 500 feet vertically and one mile horizontally of the screened portion of any known existing water supply well.) State Water Board staff has determined that 53 of the 155 injection wells are potentially impacting water supply wells. Pursuant to our joint plan of action, the Division has obtained, through order or operator relinquishment, the shut-in of 23 wells. It is awaiting receipt of additional test data before making a determination as to whether to seek shut-in before the October 15, 2015 compliance schedule date. In addition, the applicable regional water quality control boards have ordered the operators of all 155 injection wells to submit information regarding the quality of the injected fluids, the quality of the aquifer, and the location of any nearby water supply wells.

*Disposition of the Group of 356 Category 1 Wells.* Of the 356 Category 1 injection wells that were initially identified to EPA as permitted to inject into aquifers that are above a concentration of 3,000 mg/L TDS, the Division determined that 59 did not

meet the Category 1 criteria because the injection well (a) was completed in an aquifer that has a TDS concentration above 10,000 mg/L, so an exemption was not needed (47 injection wells), (b) was never drilled or permitted for waste disposal (11 injection wells), or (c) was completed in an aquifer that is exempt (1 injection well).

The State Water Board has evaluated each of the remaining 297 injection wells to determine whether the injection zone is less than 1500 feet below ground surface, such that the portion of the aquifer into which the injection well is injecting might reasonably be expected to supply a public water system. State Water Board staff has determined that 207 of the 297 injection wells have injection zones that are less than 1500 feet below ground surface. Pursuant to our joint plan of action, the Division and the State Water Board will undertake a more in depth review to assess if further action is needed to protect potential drinking water sources ahead of the deadline of February 15, 2017. In addition, the applicable regional water quality control boards plan to order the operators of all 297 injection wells to submit information regarding the quality of the injected fluids, the quality of the aquifer, and the location of any nearby water supply wells.

**3. Revised Enclosure B of the State's February 6<sup>th</sup> letter to incorporate cyclic steam wells not associated to an approved project.**

In addition to the review of the Category 1 wells, the state has identified approximately 3,600 cyclic steam wells that had some injection reported in 2014, and that are shown in Division's databases as not being associated to a permitted injection project. These wells are described in the table in Attachment F.

These wells are producing oil wells for which there is steam injection of limited duration and volume, into zones laden with hydrocarbons. Additionally, some of the formations into which steam is injected have little or essentially no permeability and therefore would not qualify as aquifers. Therefore, most of these wells are very unlikely to pose a threat to potential water supply wells. As reflected in your March 9 letter, these wells will be reviewed and analyzed by July 31, 2015. The enclosed map gives an example of a typical layout of these non-associated wells. (See Attachment G.) They tend to be intermingled with wells in an existing project and likely reflect a deficiency in the proper recording of these wells as associated to a properly permitted project.

**4. Shut in wells and issued orders for further information.**

The Division has ordered shut in, or received operator permit relinquishments, on a total of 23 wells. (Attachment H.) The State Water Board has issued orders for additional water quality information ("13267 Orders") for 157 injection wells. (Attachment I.) As the well review process continues and test results are

Mr. Michael Montgomery  
May 15, 2015  
Page 4

evaluated, the State will issue additional orders if a threat to water supply wells is determined.

We are committed to continue meeting the agreed upon schedule to bring the UIC program into compliance with the Safe Drinking Water Act, and we are also committed to revising the UIC program efficiently, with public safety as our first priority. Please let us know if you have any questions regarding the data attached with this letter.

Sincerely,



Steve Bohlen  
State Oil and Gas Supervisor  
Division of Oil, Gas and Geothermal  
Resources

Sincerely,



Jonathan Bishop  
Chief Deputy Director  
State Water Resources Control Board

Attachments

cc: Cliff Rechtschaffen, Senior Advisor, Governor's Office  
John Laird, Secretary, California Natural Resources Agency  
Matthew Rodriguez, Secretary, California Environmental Protection Agency

**Attachment B: Class II Water  
Disposal Wells Permitted to Inject  
into Non-exempt, Non-  
hydrocarbon-bearing Aquifers  
(Category 1, sub – 3,000 TDS)**

**Class II Water Disposal Wells Permitted to Inject into Non-exempt, Non-hydrocarbon-bearing Aquifers  
(Category 1, sub – 3,000 TDS)**

**Attachment B**

Well Count	District Number	Field Name	Area Name	Operator Name	API Number	Lease Name	Well Number	Zone TDS Data	Elevation	Top Perf	Injection Zone	Current Status	Permitted into 11 Historic/Exempt Aquifers?
1	4	Edison	Portain-Fairfax	Redbank Oil Co.	0290644	Porter	1	166 459 KB	2305		SANTA MARGARITA	Order Issued	
2	4	Kern Front	Any Area	Vintage Production California LLC	02908942	Movius	3	1600 890 DF	2500		SANTA MARGARITA	WD Idle	Yes
3	4	Kern Front	Any Area	Vintage Production California LLC	02908945		2	1600	2405		SANTA MARGARITA	WD	Yes
4	4	Mount Poso	West	Macpherson Operating Company, L.P.	02914048	Ring 1B	9	2189 1041 GL	500		VEDDER	WD	
5	4	Mount Poso	West	Macpherson Operating Company, L.P.	02914064	Ring 20	8	2172 849 KB	429		OLCESE	Order Issued	
6	4	Mountain View	Main	Bennett Petroleum, Inc.	02914276	Mott	1	1232 450 GL	8890		KERN RIVER/CHANAC	WD Idle	
7	4	Mountain View	Arvin	Sunray Petroleum, Inc.	02914595	Georgis	19	954 479 KB	2918		KERN RIVER	WD Idle	
8	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	02914764	New Hope	SWD1	1485 567 DF	2287		SANTA MARGARITA	WD	
9	4	Poso Creek	Enas	E & B Natural Resources Management Corporation	02916041	Cuccia-U.S.L.	76	1105 560 KB	1942		ETCHEGOIN/CHANAC	WD Idle	
10	4	Round Mountain	Sharktooth	Macpherson Oil Company	02918114	Sisban	6	2693 1100 GL	540		OLCESE	Order Issued	Yes
11	4	Round Mountain	Sharktooth	Macpherson Oil Company	02918119	Malta	3	2693 987 GL	740		OLCESE	WD Idle	Yes
12	4	Round Mountain	Main	Pace Diversified Corporation	02918136	Newbery Gibson	8	2000 815 KB	2450		VEDDER/WALKER	WD	Wa - Yes
13	4	Union Avenue	Any Area	Trio Petroleum LLC	02920701	Roberts	1	1845 403 GL	8738		CHANAC/SANTA MARGARITA	OG	
14	4	Kern River	Any Area	Chevron U.S.A. Inc.	02926346	Overland	31D	1120 707 DF	756		CHANAC/SANTA MARGARITA	WD Idle	Yes
15	4	Kern River	Any Area	Chevron U.S.A. Inc.	02940729	Government 3	3	750 1059 KB	790		KERN RIVER	WD	
16	4	Union Avenue	Any Area	Trio Petroleum LLC	02942238	Pon	1	1845 414 KB	6330		CHANAC/SANTA MARGARITA	WD - S.M.	
17	4	Round Mountain	Coffee Canyon	Macpherson Oil Company	02942612	Pearce	7-1	1265 799 KB	1567		PYRAMID HILL/VEDDER	WD	
18	4	Mount Poso	Dominion	Vintage Production California LLC	02942966	Safley Energy	8	530 1096 KB	1484		OLCESE	Order Issued	
19	4	Kern River	Any Area	Chevron U.S.A. Inc.	02944305	Luck	50B	701 816 MAT	827		Kern River	OG, SC	
20	4	Round Mountain	Main	Macpherson Oil Company	02946951		WD-1	1967 1210 KB	2256		VEDDER/WALKER	WD	Wa - Yes
21	4	Round Mountain	Main	Macpherson Oil Company	02947362		WD-2	1967 1158 GL	2349		VEDDER/WALKER	WD	Wa - Yes
22	4	Mount Poso	Main	Vintage Production California LLC	02947370	Vedder-Rail	W.D. 314	2900 1223 DF	2355		PYRAMID HILL/VEDDER	WD Idle	
23	4	Mount Poso	Main	Vintage Production California LLC	02947371	Vedder-Rail	W.D. 316	2900 1201 DF	2368		PYRAMID HILL/VEDDER	WD Idle	
24	4	Round Mountain	Main	Macpherson Oil Company	02947441	Olcese	WD-342	2835	2170		OLCESE/FREEMAN-JEWETT/VED/WALK	WD	Yes
25	4	Round Mountain	Main	Macpherson Oil Company	02947543	Jewett	WD-227	2835 820 DF	1983		OLCESE/FREEMAN-JEWETT/VED/WALK	WD	Yes
26	4	Jasmin	Any Area	Hathaway LLC	02947687	Quinn	14-10	380 578 RT	2797		CANTLEBERRY	WD	
27	4	Kern Front	Any Area	Western States International, Inc.	02948128	Mitchel	75	390 719 KB	1444		CHANAC	WD	
28	4	Kern Front	Any Area	Longbow, LLC	02948513	Judkins	1-7	290 768 KB	1468		CHANAC	OG	
29	4	Kern Front	Any Area	Western States International, Inc.	02949825	Mitchel	75	390 747 KB	1474		CHANAC	OG	
30	4	Kern Front	Any Area	Western States International, Inc.	02949915	Mitchel	65	480 724 KB	1477		ETCHEGOIN/CHANAC	WD Cancelled, SF Idle	
31	4	Kern Front	Any Area	Western States International, Inc.	02949916	Mitchel	67	480 739 KB	1515' Top of slotted liner.		ETCHEGOIN/CHANAC	WD Cancelled, SF Idle	
32	4	Fruitvale	Main	Gordon Dole	02950233	State	1	904 443 KB	2835		ETCHEGOIN (FAIRHAVEN)	WD	
33	4	Kern Front	Any Area	Longbow, LLC	02950263	Judkins	7-7	330 753 KB	1441		CHANAC	OG	
34	4	Mount Poso	Main	Vintage Production California LLC	02950412	Shapiro	234	1069 1014 DF	1760		VEDDER/WALKER	WD	Wa - Yes
35	4	Mount Poso	Main	Pace Diversified Corporation	02950650	Tribe A	10	816 888 KB	233		OLCESE	Order Issued	
36	4	Mount Poso	Main	Vintage Production California LLC	02950738	Shapiro	222	1069 1063 KB	1860		VEDDER/WALKER	WD	Wa - Yes
37	4	Kern Front	Any Area	Vintage Production California LLC	02951043	Kern	WWD 1	2318 805 KB	2539		SANTA MARGARITA	WD	Yes
38	4	Kern River	Any Area	Chevron U.S.A. Inc.	02951179	Monter Cristo No. 1	1D-12B	701 565 DF	564		KERN RIVER	OG, SC	
39	4	Kern River	Any Area	Chevron U.S.A. Inc.	02955750	H H & F	2D	1400 488 DF	1130		CHANAC/SANTA MARGARITA	WD Idle	Yes

Class II Water Disposal Wells Permitted to Inject into Non-exempt, Non-hydrocarbon-bearing Aquifers  
(Category 1, sub – 3,000 TDS)

Attachment B

Well Count	District Number	FieldName	AreaName	OperatorName	APINumber	LeaseName	WellNumber	Zone TDS Data	Elevation	Top Perf	InjectionZone	Current Status	Permitted into 11 Historically Exempt Aquifers?
40	4	Mount Poso	Main	Vintage Production California LLC	02957201	Rench	WD 346	2900	877 DF	1656	PYRAMID HILL/VEDDER	WD	
41	4	Poso Creek	McVan	Linn Operating, Inc.	02958126	JSL	1A-16SWD	2060	853 KB	1478	SANTA MARGARITA	WD	
42	4	Mount Poso	Baker-Gower	Pace Diversified Corporation	02958278	Tribe-B	25WD-28	1290	1063 KB	588	OLCSE	Order Issued	
43	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	02958585	USL	12-8	570	605 KB	2200	BASAL CHANAC/SANTA MARGARITA	WD - S.M	
44	4	McKittrick	Northeast	Linn Operating, Inc.	02958657		9-2	1975	1058 DF	420	TULARE (UPPER AIR SANDS)	WD	
45	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	02959841	Federal	8-3	2734	622 KB	2916	CHANAC/SANTA MARGARITA	WD - Ch - S.M	
46	4	Poso Creek	McVan	E & B Natural Resources Management Corporation	02960214	Claffin	10	262	961 KB	1322	ETCHEGOIN	WD Idle	
47	4	Kern Front	Any Area	Vintage Production California LLC	02961469		D-11	1600	890 KB	2330	SANTA MARGARITA	WD	Yes
48	4	Kern River	Any Area	Kern River Holdings Inc	02962003	Ferne	SWD 1	960	570 KB	2140	SANTA MARGARITA/VEDDER	WD	S.M. - Yes
49	4	Kern Front	Any Area	Balaira Oil Company	02962979		4-4W	890	664 DF	2840	SANTA MARGARITA	WD Idle	Yes
50	4	Midway-Sunset	Any Area	Linn Operating, Inc.	02963183	Fairfield	85	2800	1430	1374	POTTER	WD - TDS is 4630 mg/L - May 2015 Update	
51	4	Mount Poso	Main	Vintage Production California LLC	02965841	Vedder-Rail	WD 325	2900	1218 KB	2940	PYRAMID HILL/VEDDER	WD	
52	4	Mount Poso	Main	Vintage Production California LLC	02967085	Shapiro	365 WD	1069	1034 DF	1840	VEDDER/WALKER	WD	Wa - Yes
53	4	Mount Poso	Main	Vintage Production California LLC	02967509	S.N.B.	256	619	1050 DF	1753	PYRAMID HILL	OS	
54	4	Kern River	Any Area	Chevron U.S.A. Inc.	02967907	Overland	34WD	1120	797 DF	624	CHANAC/SANTA MARGARITA	WD Idle	Yes
55	4	Mount Poso	Main	Vintage Production California LLC	02968645	Vedder-Rail	WD 143	2900	1365 DF	2069	PYRAMID HILL/VEDDER	WD Idle	
56	4	Mount Poso	Main	Vintage Production California LLC	02968733	Matthew Fee	232WD	2900	1177 DF	2000	PYRAMID HILL/VEDDER	WD	
57	4	Mount Poso	Main	Vintage Production California LLC	02968734	Matthew Fee	263WD	2900	1160 DF	1881	PYRAMID HILL/VEDDER	WD Idle	
58	4	Mount Poso	Main	Vintage Production California LLC	02968909	Vedder-Rail	WD 131R	2900	1342 DF	1970	PYRAMID HILL/VEDDER	WD Idle	
59	4	Round Mountain	Main	Macpherson Oil Company	02969119		WD 1	1967	1239 KB	2095	VEDDER/WALKER	WD	Wa - Yes
60	4	Round Mountain	Main	Macpherson Oil Company	02969120		WD 2	1967	1405 KB	2505	VEDDER/WALKER	WD	Wa - Yes
61	4	Mount Poso	Main	Vintage Production California LLC	02969364	Vedder	WD 881	2900	1215 DF	1492	PYRAMID HILL/VEDDER	WD Idle	
62	4	Tejon	Western	Vintage Production California LLC	02969623		330-32	2500	1088 KB	3000	TRANSITION/SANTA MARGARITA	WD	
63	4	Kern River	Any Area	Chevron U.S.A. Inc.	02970045	San Joaquin	WD 3	946		1400	CHANAC/SANTA MARGARITA	WD	Yes
64	4	Kern River	Any Area	Chevron U.S.A. Inc.	02970046	San Joaquin	WD 4	1018	502 GL	2043	SANTA MARGARITA	WD	Yes
65	4	Kern River	Any Area	Chevron U.S.A. Inc.	02970047	San Joaquin	WD 5	1018	489 GL	2112	SANTA MARGARITA	WD	Yes
66	4	Kern River	Any Area	Chevron U.S.A. Inc.	02970048	San Joaquin	WD 6	1018	523 GL	1560	SANTA MARGARITA	WD	Yes
67	4	Kern River	Any Area	Chevron U.S.A. Inc.	02970049	San Joaquin	WD 7	946		1620	CHANAC/SANTA MARGARITA	WD	Yes
68	4	Kern River	Any Area	Chevron U.S.A. Inc.	02971217	Overland	35WD	1018		838	SANTA MARGARITA	WD Idle	Yes
69	4	Kern River	Any Area	Chevron U.S.A. Inc.	02972050	KCL-10	2X	694	699		CHANAC/SANTA MARGARITA	WD Idle	Yes
70	4	Kern Front	Any Area	Vintage Production California LLC	02973065	Movius A	18	1600	883 KB	2470	SANTA MARGARITA	WD Idle	Yes
71	4	Kern River	Any Area	Chevron U.S.A. Inc.	02973218	Government 3	557	1177		1028	KERN RIVER,CHANAC,SANTA MARGAR	WD	Ch. , S.M. -Yes
72	4	Mount Poso	Main	Vintage Production California LLC	02973976	Matthew Fee	272WD	2900	1136 DF	1829	PYRAMID HILL/VEDDER	WD Idle	
73	4	Mount Poso	Main	Vintage Production California LLC	02974055	Matthew Fee	276WD	2900	1136 DF	1878	PYRAMID HILL/VEDDER	WD	
74	4	Mount Poso	Main	Pace Diversified Corporation	02974716	Tribe A	14	1652	840 KB	2092	VEDDER	WD Idle	
75	4	Kern River	Any Area	Chevron U.S.A. Inc.	02975045	American Naphtics	D1-31	1400		2456	CHANAC/SANTA MARGARITA	OK	
76	4	Kern River	Any Area	Chevron U.S.A. Inc.	02975049		D3-3	1400		965	CHANAC/SANTA MARGARITA	WD	Yes
77	4	Kern River	Any Area	Chevron U.S.A. Inc.	02975053	Monte Cristo No. 1	D3-5	1400	385 DF	1412	CHANAC/SANTA MARGARITA	OK	

Class II Water Disposal Wells Permitted to Inject into Non-exempt, Non-hydrocarbon-bearing Aquifers  
(Category 1, sub – 3,000 TDS)

Well Count	District Number	Field Name	Area Name	Operator Name	API Number	Lease Name	Well Number	Zone TDS Data	Elevation	Top Perf	Injection Zone	Current Status	Permitted into 11 Historically Exempt Aquifers?
78	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	02975129	Midway Premier	62	1485	674 DF	2880	SANTA MARGARITA	WD	
79	4	Edison	Edison Groves	RBR Resources, LLC	02975558	Lehr	38	244	1407		KERN RIVER	Under review	
80	4	Kern River	Any Area	Chevron U.S.A. Inc.	02976134	Gold Standard	WD-1	1018	1773		SANTA MARGARITA	WD Idle	Yes
81	4	Kern River	Any Area	Chevron U.S.A. Inc.	02976158	San Joaquin	WD 9	946	3510		CHANAC/SANTA MARGARITA	WD	Yes
82	4	Kern River	Any Area	Chevron U.S.A. Inc.	02976159	May	WD-1	946	1450		CHANAC/SANTA MARGARITA	WD Idle	Yes
83	4	Mount Poso	Main	Vintage Production California LLC	02976530	Sarrett Fee	445WD	2900	1934		PYRAMID HILL/VEDDER	WD Idle	
84	4	Round Mountain	Coffee Canyon	Arthur McAdams	02976603	Caldwell	13	1980	1010 KB	2070	PYRAMID HILL/VEDDER	WD	
85	4	Mount Poso	Main	Vintage Production California LLC	02976604	Shapiro	132	1069	1051 DF	1734	VEDDER/WALKER	WD New	Wa - Yes
86	4	Mount Poso	Main	Vintage Production California LLC	02976605	Shapiro	134	1069	1057 DF	1764	VEDDER/WALKER	WD	Wa - Yes
87	4	Kern River	Any Area	Chevron U.S.A. Inc.	02977807	KCL-10	212	1018	1259		SANTA MARGARITA	WD Idle	Yes
88	4	McKittick	Northeast	Chevron U.S.A. Inc.	02979339	Giant	10-WW	2740	180		TULARE	PEA	
89	4	McKittick	Northeast	Chevron U.S.A. Inc.	02979439	Del Monte	3-WW	2740	1085 KB	278	TULARE	PEA	
90	4	Kern River	Any Area	Chevron U.S.A. Inc.	02979468	Day's Fee	D3-8	1400	1817		CHANAC/SANTA MARGARITA	OG	
91	4	Kern River	Any Area	Chevron U.S.A. Inc.	02980256		25-WD 1	1018	845 MAT	2182	SANTA MARGARITA	WD	Yes
92	4	Kern River	Any Area	Chevron U.S.A. Inc.	02980421	Orient	WD 1	1018	1912		SANTA MARGARITA	WD	Yes
93	4	Midway-Sunset	Any Area	Linn Operating, Inc.	02982889	Fairfield	166	2800	1410		POTTER	WD, TDS is 4630 mg/L - May 2015 Update	
94	4	Mount Poso	Main	Vintage Production California LLC	02982922	Vedder-Rail	WD 155R	2900	1314 DF	1987	PYRAMID HILL/VEDDER	WD Idle	
95	4	Kern River	Any Area	Chevron U.S.A. Inc.	02983024	Fee A	WDW 3	1018	2075		SANTA MARGARITA	WD Idle	Yes
96	4	Kern River	Any Area	Chevron U.S.A. Inc.	02983025	Fee B	WDW 2	1018	1998		SANTA MARGARITA	WS - Ch	
97	4	Kern River	Any Area	Chevron U.S.A. Inc.	02983163	Queen Esther	WD 1	1018	2128		SANTA MARGARITA	WD	Yes
98	4	Kern River	Any Area	Chevron U.S.A. Inc.	02983164	Sterling	WD 1	1018	1807		SANTA MARGARITA	WD	Yes
99	4	Kern River	Any Area	Chevron U.S.A. Inc.	02983235	Fee A	WDW 4	1018	2078		SANTA MARGARITA	WD	Yes
100	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	02984583	USL	2-6	570	714 GL	2660	BASAL CHANAC/SANTA MARGARITA	WD - Ch - S.M	
101	4	Kern River	Any Area	Chevron U.S.A. Inc.	02984592	Pearl E Berry	WD-1	1018	1486		SANTA MARGARITA	WD	Yes
102	4	Kern Front	Any Area	Badger Creek Ltd.	02986511		WD 1	1500	2310		SANTA MARGARITA	WD	Yes
103	4	Mount Poso	West	Macpherson Operating Company, LP	02987904	Reg 1B	21	2199	993 KB	2380	VEDDER	WD	Yes
104	4	Kern River	Any Area	Kern River Holdings Inc.	03000162	Nukern	WD-1	1135	555 KB	2085	SANTA MARGARITA	WD	Yes
105	4	McKittick	Northeast	Linn Operating, Inc.	03001169		8W 5	1975	1035 KB	350	TULARE (UPPER AIR SANDS)	WD	
106	4	Kern River	Any Area	Chevron U.S.A. Inc.	03006705	Fee B	WDW 3	1018	595 KB	2015	SANTA MARGARITA	WD	Yes
107	4	Union Avenue	Any Area	Trio Petroleum LLC	03007190	Unit	1	1845	414 KB	4410	CHANAC/SANTA MARGARITA	WD	
108	4	Round Mountain	Main	Macpherson Oil Company	03009336		WD-4	1967	1010 GL	2144	VEDDER/WALKER	OG	
109	4	Kern River	Any Area	Chevron U.S.A. Inc.	03010793	Hotchkiss	14D-10	1018	462 KB	991	SANTA MARGARITA	WD	Yes
110	4	Kern River	Any Area	Vintage Production California LLC	03010794		WD-1	1000	924 KB	333	KERN RIVER	WD	
111	4	Kern River	Any Area	Vintage Production California LLC	03010795		WD-2	1000	946 KB	563	KERN RIVER	WD	
112	4	Kern Front	Any Area	Vintage Production California LLC	03018994	Robinson	8-WD1	1300	838 KB	2774	SANTA MARGARITA	WD Idle	Yes
113	4	Kern Front	Any Area	Vintage Production California LLC	03019413	Young Fee	WD1	1600	820 KB	2322	SANTA MARGARITA	WD	Yes
114	4	Kern Front	Any Area	Vintage Production California LLC	03019563		WD1	1600	793 KB	2456	SANTA MARGARITA	WD	Yes
115	4	Round Mountain	Main	Macpherson Oil Company	03022157		WD-6	1967	1237 KB	2359	VEDDER/WALKER	WD	Wa - Yes

**Class II Water Disposal Wells Permitted to Inject into Non-exempt, Non-hydrocarbon-bearing Aquifers  
(Category 1, sub – 3,000 TDS)**

Well Count	District Number	Field Name	Area Name	Operator Name	API Number	Lease Name	Well Number	Zone TDS Data	Elevation	Top Part	Injection Zone	Current Status	Permitted into 11 Historically Exempt Aquifers?
116	4	Tejon	Western	Vintage Production California LLC	03026630		WWD3-32	2255	1034 KB	3075	TRANSITION	WD	
117	4	Poso Creek	McVan	Urrn Operating, Inc.	03027039	USL	17-3WD	2060	919 KB	1628	SANTA MARGARITA	WD	
118	4	Poso Creek	McVan	Urrn Operating, Inc.	03027060	USL	10-1WD	2060	968 KB	1529	SANTA MARGARITA	WD	
119	4	Round Mountain	Main	Macpherson Oil Company	03031655	KCL	WD-1	1967	1158 KB	2428	VEDDER/WALKER	WD	Wa - Yes
120	4	Round Mountain	Main	Macpherson Oil Company	03031656	Thomas	WD-1	1967	1164 KB	2354	VEDDER/WALKER	WD	Wa - Yes
121	4	Poso Creek	McVan	Urrn Operating, Inc.	03032463	McVan	WDW 3	2060	786 KB	1510	SANTA MARGARITA	WD	
122	4	Kern Front	Any Area	Vintage Production California LLC	03032871		WD2	1600	804 KB	2374	SANTA MARGARITA	WD	Yes
123	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	03033614	New Hope	21WD	1486	463 KB	2295	SANTA MARGARITA	WD	
124	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	03033615	New Hope	23WD	1486	486 KB	2285	SANTA MARGARITA	WD	
125	4	Round Mountain	Main	Macpherson Oil Company	03033731		WD-7	1967	1477 KB	2554	VEDDER/WALKER	WD	Wa - Yes
126	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	03034634	New Hope	24WD	1486	507 KB	2330	SANTA MARGARITA	WD	
127	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	03034900	New Hope	12WD	1486	432 KB	2640	SANTA MARGARITA	WD	
128	4	Round Mountain	Main	Macpherson Oil Company	03035699	KCL	WD-2	1967	1226 KB	2480	VEDDER/WALKER	WD	Wa - Yes
129	4	Round Mountain	Main	Macpherson Oil Company	03037954		WD-3	1967	1073 KB	1953	VEDDER/WALKER	WD	Wa - Yes
130	4	Poso Creek	McVan	Urrn Operating, Inc.	03038897	McVan	WDW4	2060	799 KB	1466	SANTA MARGARITA	WD	
131	4	Chico-Martinez	Any Area	CMO, Inc.	03039920	Mitchel	35-001	710	956 KB	248	TULARE	Order Issued	
132	4	Poso Creek	McVan	Urrn Operating, Inc.	03040214	Poso	WDW 5	2060	809 KB	1683	SANTA MARGARITA	WD	
133	4	Round Mountain	Main	Macpherson Oil Company	03040669	Thomas	WD-2	1967	1038 KB	2208	VEDDER/WALKER	WD	Wa - Yes
134	4	Round Mountain	Main	Macpherson Oil Company	03041397		WD-8	1967	1115 KB	2196	VEDDER/WALKER	WD	Wa - Yes
135	4	Round Mountain	Main	Macpherson Oil Company	03042188		WD-9	1967	1314 KB	2388	VEDDER/WALKER	WD	Wa - Yes
136	4	McKittrick	Northeast	Urrn Operating, Inc.	03042399		WD 3	1975	1052 KB	310	TULARE (UPPER AIR SANDS)	WD	Wa - Yes
137	4	Mount Poso	West	Macpherson Operating Company, L.P	03042925	Ring 18	WD-1	2199	1042 KB	2430	VEDDER	WD	
138	4	Round Mountain	Main	Macpherson Oil Company	03043514	Thomas	TOW-2	1967	1174 KB	2466	VEDDER/WALKER	WD	
139	4	Round Mountain	Main	Macpherson Oil Company	03043896		WD-10	1967	1243 KB	2067	VEDDER/WALKER	WD	Wa - Yes
140	4	Chico-Martinez	Any Area	CMO, Inc.	03044645	Mitchel	35-008	710	938 KB		TULARE	Order Issued	
141	4	Kern Front	Any Area	Vintage Production California LLC	03044524	Young Fee	WD2	1600	848 KB	2775	SANTA MARGARITA	WD	Yes
142	4	Round Mountain	Main	Macpherson Oil Company	03044556	KCL	WD-3	1967	1112 KB	2400	VEDDER/WALKER	WD	Wa - Yes
143	4	Kern River	Any Area	Kern River Holdings Inc.	03044983	Nukern	WD-2	1135	559 KB	2163	SANTA MARGARITA	WD	Yes
144	4	Kern River	Any Area	Kern River Holdings Inc.	03044986	Nukern	WD-3	1135	559 kb	2125	SANTA MARGARITA	WD	Yes
145	4	Kern River	Any Area	Grey Development Co. LLC	03046344	Grey	WD-1	500	338 KB	773	SANTA MARGARITA	Order Issued	Yes
146	4	Round Mountain	Main	Macpherson Oil Company	03046642	USL 18	WD-12	1967	1176 KB	2368	VEDDER/WALKER	WD	Wa - Yes
147	4	Round Mountain	Main	Macpherson Oil Company	03046643	USL 18	WD-13	1967	1176 DF	2390	VEDDER/WALKER	WD	Wa - Yes
148	4	Round Mountain	Main	Macpherson Oil Company	03046653	KCL	WD-4	1967	1208 KB	2469	VEDDER/WALKER	WD	Wa - Yes
149	4	Round Mountain	Coffee Canyon	Macpherson Oil Company	03049700	West Signal	WD-8R	1265	774 DF	1891	WALKER	WD	Yes
150	4	Kern Front	Any Area	Vintage Production California LLC	03050047	Young Fee	WD3	1600	820 KB	2743	SANTA MARGARITA	WD	Yes
151	4	Kern River	Any Area	Kern River Holdings Inc.	03050678	Ferne	SWD-2	1135	578 KB	2195	SANTA MARGARITA	WD	Yes
152	4	Kern River	Any Area	Kern River Holdings Inc.	03050753	Orloff	SWD-1	1135	597 KB	2233	SANTA MARGARITA	WD	Yes
153	4	Poso Creek	Premier	E & B Natural Resources Management Corporation	03050777	Section 21	WD5	1486	650 KB	2756	ETCHEGOIN/SANTA MARGARITA	WD New - Et.	Yes
154	4	Round Mountain	Main	Macpherson Oil Company	03051196		WD-16	1967	1295	2408	VEDDER/WALKER	WD	Wa - Yes

**Class II Water Disposal Wells Permitted to Inject into Non-exempt, Non-hydrocarbon-bearing Aquifers  
(Category 1, sub – 3,000 TDS)**

Well Count	District Number	Field Name	Area Name	Operator Name	API Number	Lease Name	Well Number	Zone	TDS Data	Elevation	Top Perf	Injection Zone	Current Status	Permitted into 11 Historically Exempt Aquifers?
155	4	Round Mountain	Main	Macpherson Oil Company	03051197		WD-17		1967	1295	2416	VEDDER/WALKER	WD	Wa - Yes
156	4	Round Mountain	Main	Macpherson Oil Company	03051959	Olcese 1	WD-343R		2835	1133 df	2644	OLCESE/FREEMAN-JEWETT/VED/WALK	WD - Ve - Wa	Yes
157	4	Round Mountain	Main	Macpherson Oil Company	03051960	Olcese 1	WD-344		2835	1143 DF	2173	OLCESE/FREEMAN-JEWETT/VED/WALK	WD	Yes
158	4	Poso Creek	McVan	E & B Natural Resources Management Corporation	03052514	Enas Fee	WD1		480		8537	SANTA MARGARITA	No Data	
159	4	Tejon	Western	Vintage Production California LLC	03053049	J.V.	WW07-32		2255	1085 KB	3358	TRANSITION	WD	
160	4	Tejon	Western	Vintage Production California LLC	03053050	J.V.	WW08-32		2400	1045 KB	3557' top of slotted liner	TRANSITION	No Data	
161	4	Round Mountain	Main	Macpherson Oil Company	03054306		WD 4H		1967	1173' KB	3058	VEDDER/WALKER	WD new	Wa - Yes
162	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07920419	Signal E.T.S.	135		1820	410	780	Dallie Zone	WD	
163	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07920426	Signal E.T.S.	140		1820	420	705	Dallie Zone	WD	
164	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07920436	Signal E.T.S.	161		1820	359	540	Dallie Zone	WD idle	
165	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07920498	Signal E.T.S.	169		1820	427	500	Dallie Zone	WD	
166	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07920639	Hyla	17H		1820	175	930	Dallie Zone	OG	
167	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07920659	Hyla	19H-1		1820	210	870	Dallie Zone	OG	
168	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07920723	Pulas	2		1820	461	1750	Dallie Zone	OG	
169	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07920794	Pulas	3		1820	423	1349	Dallie Zone	WD	
170	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07921105	Pulas	4		1820	389	734	Dallie Zone	WD	
171	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07921154	Pulas	6		1820	408.29	596	Dallie Zone	WD	
172	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07921202	Pulas	7		1820	369	550	Dallie Zone	WD	
173	3	Arroyo Grande	Tiber	Freeport-McMoran Oil & Gas LLC	07921203	Pulas	8		1820	421	460	Dallie Zone	WD	
174	3	Cat Canyon	West	Greka Oil & Gas Inc.	08101242	Los Flores	E-23		2870	1067	8689	SHILOH	WD idle - TDS is 23000 mg/L inside primary productive limit - Update May 2015	
175	4	Deer Creek	Any Area	Modus, Inc	10720109	Filippi	107-2		300	454 KB	690	SANTA MARGARITA	WD	
176	4	Deer Creek	Any Area	Longbow, LLC	10720138	Community	11		740	463 KB	856	SANTA MARGARITA	OG	

Reviewed and removed from the list, including but not limited to one or more of the following reasons: well plugged and abandoned, well converted an oil and gas well in another zone, well completed within exempted aquifer

Orders issued

Bolded lettering reflects recent updates (May 2015)

**Attachment C: 207 of 356 Category 1  
Injection Wells**

207 Wells Injecting into Aquifers that are Reasonably Expected to Supply a Public Water Supply System  
 Category 1 (3,000-10,000 TDS)

Attachment C

FieldName	Operator Name	API Number	Latitude	Longitude	Zone TDS Data	Injection Zone	Top Perf	Number of Wells Supply Wells Identified within One Mile Radius
Kern River	Chevron U.S.A. Inc.		35.428004	-118.951271	3325	Chanac	700	40
Kern River	Chevron U.S.A. Inc.		35.423901	-118.964503	3325	Chanac	960	21
Asphalt	Cather-Herley Oil Company	2935880	35.295424	-119.583761	5000	L TULARE	1190	0
Bairdridge, South	Vintage Production California LLC		35.41096289	-119.6522889	9800	Tulare	909	4
Bairdridge, South	Vintage Production California LLC		35.41097193	-119.6501637	9800	Tulare	915	4
Buena Vista	Vintage Production California LLC		35.196135	-119.387669	9168	Tulare	1080	11
Buena Vista	Vintage Production California LLC	2975577	35.133522	-119.404516	9167	TULARE	775	0
Buena Vista	Valley Water Management Company	2982559	35.223441	-119.543507	5898	TULARE (UNSATURATED)	388	0
Buena Vista	Valley Water Management Company	2982560	35.22043	-119.543802	5898	TULARE (UNSATURATED)	445	0
Buena Vista	Valley Water Management Company	2982561	35.22357	-119.540078	5898	TULARE (UNSATURATED)	431	0
Buena Vista	Valley Water Management Company	2982562	35.220435	-119.54044	5898	TULARE (UNSATURATED)	472	0
Buena Vista	Valley Water Management Company	2982563	35.223299	-119.536381	5898	TULARE (UNSATURATED)	370	0
Buena Vista	Valley Water Management Company	2982564	35.221241	-119.536943	5898	TULARE (UNSATURATED)	450	0
Buena Vista	Valley Water Management Company	3053085	35.220022	-119.545305	5898	TULARE (UNSATURATED)	425	0
Cymric	Chevron U.S.A. Inc.		35.362108	-119.651592	7484	TULARE	578	1
Cymric	Chevron U.S.A. Inc.	2986992	35.364597	-119.649791	7484	TULARE	488	0
Cymric	Chevron U.S.A. Inc.		35.362274	-119.645128	7484	Tulare	542	1
Cymric	Chevron U.S.A. Inc.	3032805	35.359668	-119.65252	7484	TULARE	580	0
Cymric	Chevron U.S.A. Inc.		35.356323	-119.64948	7484	Tulare	560	1
Cymric	Chevron U.S.A. Inc.	3037968	35.36219991	-119.658133	7484	TULARE	604	0
Edison	Nafco Operating Company		35.373461	-118.844387	5602	Okeese	1035	9
ER Hills	Occidental of ER Hills, Inc.	2961139	35.237924	-119.472598	4668	TULARE	557	0
ER Hills	Occidental of ER Hills, Inc.	2966694	35.237876	-119.432674	4668	Tulare	428	1
ER Hills	Occidental of ER Hills, Inc.	2967555	35.234285	-119.42836	4668	Tulare	428	1
ER Hills	Occidental of ER Hills, Inc.	2973097	35.239748	-119.434904	4668	Tulare	459	1
ER Hills	Occidental of ER Hills, Inc.	2973098	35.238009	-119.434964	4668	Tulare	450	1
ER Hills	Occidental of ER Hills, Inc.	2975252	35.239875	-119.439817	4668	Tulare	443	1
ER Hills	Occidental of ER Hills, Inc.	2985821	35.239633	-119.44212	4668	Tulare	390	1
ER Hills	Occidental of ER Hills, Inc.	2985822	35.239883	-119.436778	4668	Tulare	370	1
ER Hills	Occidental of ER Hills, Inc.	3002301	35.241505	-119.44444	4668	Tulare	438	1
ER Hills	Occidental of ER Hills, Inc.	3003239	35.243086	-119.453283	4668	Tulare	394	1
ER Hills	Occidental of ER Hills, Inc.	3003240	35.243076	-119.448846	4668	Tulare	402	1
ER Hills	Occidental of ER Hills, Inc.	3002055	35.227075	-119.438371	4668	Tulare	864	1
ER Hills	Occidental of ER Hills, Inc.	3002056	35.227165	-119.43457	4668	Tulare	905	1
ER Hills	Occidental of ER Hills, Inc.	3021008	35.226952	-119.444951	4668	Tulare	775	1
ER Hills	Occidental of ER Hills, Inc.	3021009	35.226921	-119.44157	4668	Tulare	825	1
ER Hills	Occidental of ER Hills, Inc.	3021378	35.22699	-119.451625	4668	Tulare	738	1
ER Hills	Occidental of ER Hills, Inc.	3021379	35.226991	-119.448301	4668	Tulare	594	1
ER Hills	Occidental of ER Hills, Inc.	3022130	35.229324	-119.456666	4668	Tulare	673	1
ER Hills	Occidental of ER Hills, Inc.	3022131	35.229694	-119.455002	4668	Tulare	704	1
ER Hills	Occidental of ER Hills, Inc.	3022133	35.229416	-119.449946	4668	Tulare	746	1
ER Hills	ER Hills Power, LLC	3022952	35.230615	-119.443503	4560	Tulare	724	1
ER Hills	ER Hills Power, LLC	3022953	35.230621	-119.442383	4560	Tulare	648	1
ER Hills	Occidental of ER Hills, Inc.	3024632	35.239597	-119.423622	4668	TULARE	727	0
ER Hills	Occidental of ER Hills, Inc.	3025048	35.235379	-119.463054	4668	Tulare	730	0
ER Hills	Occidental of ER Hills, Inc.	3025050	35.239392	-119.459642	4668	Tulare	760	1
ER Hills	Occidental of ER Hills, Inc.	3025050	35.226785	-119.458369	4668	Tulare	684	1
ER Hills	Occidental of ER Hills, Inc.	3025512	35.284885	-119.484179	5800	L TULARE	568	0
ER Hills	Occidental of ER Hills, Inc.	3026284	35.288198	-119.490129	5800	L TULARE	512	0
ER Hills	Occidental of ER Hills, Inc.	3026747	35.23199081	-119.4613571	4668	Tulare	779	1
ER Hills	Occidental of ER Hills, Inc.	3027211	35.23209763	-119.4643784	4668	Tulare	752	0
ER Hills	Occidental of ER Hills, Inc.	3027214	35.2321434	-119.4577942	4668	Tulare	741	1
ER Hills	Occidental of ER Hills, Inc.	3027215	35.23234558	-119.454834	4668	Tulare	743	1
ER Hills	Occidental of ER Hills, Inc.	3027985	35.29059219	-119.490799	5800	L TULARE	502	0
ER Hills	Occidental of ER Hills, Inc.	3027986	35.29060745	-119.4938736	5800	L TULARE	468	0
ER Hills	Occidental of ER Hills, Inc.	3027987	35.28835678	-119.4873047	5800	L TULARE	592	0
ER Hills	Occidental of ER Hills, Inc.	3027988	35.2866478	-119.4872971	5800	L TULARE	547	0
ER Hills	Occidental of ER Hills, Inc.	3027989	35.28691483	-119.4844513	5800	L TULARE	578	0
ER Hills	Occidental of ER Hills, Inc.	3029340	35.2873826	-119.4930344	5800	L TULARE	467	0
ER Hills	Occidental of ER Hills, Inc.	3029341	35.28543854	-119.493927	5800	L TULARE	509	0
ER Hills	Occidental of ER Hills, Inc.	3029342	35.28377533	-119.493927	5800	L TULARE	537	0
ER Hills	Occidental of ER Hills, Inc.	3029343	35.28630447	-119.4919891	5800	L TULARE	491	0
ER Hills	Occidental of ER Hills, Inc.	3029369	35.28329468	-119.4908981	5800	L TULARE	549	0
ER Hills	Occidental of ER Hills, Inc.	3029370	35.28575516	-119.4906464	5800	L TULARE	544	0
ER Hills	Occidental of ER Hills, Inc.	3029371	35.28450012	-119.4888992	5800	L TULARE	572	0
ER Hills	Occidental of ER Hills, Inc.	3029372	35.28240585	-119.4893112	5800	L TULARE	592	0
ER Hills	Occidental of ER Hills, Inc.	3031791	35.23167419	-119.4372025	4668	Tulare	506	1
ER Hills	Occidental of ER Hills, Inc.	3031877	35.23394012	-119.4328918	4668	Tulare	600	1
ER Hills	Occidental of ER Hills, Inc.	3031883	35.23008347	-119.4357224	4668	Tulare	746	1
ER Hills	Occidental of ER Hills, Inc.	3031884	35.23121643	-119.4338837	4668	Tulare	543	1
ER Hills	Occidental of ER Hills, Inc.	3033697	35.28836441	-119.499548	5800	L TULARE	516	0
ER Hills	Occidental of ER Hills, Inc.	3033698	35.28619766	-119.4997482	5800	L TULARE	590	0
ER Hills	Occidental of ER Hills, Inc.	3033699	35.28815079	-119.4964828	5800	L TULARE	563	0
ER Hills	Occidental of ER Hills, Inc.	3033700	35.28690905	-119.4968872	5800	L TULARE	546	0
ER Hills	Occidental of ER Hills, Inc.	3033831	35.29029846	-119.4965134	5800	L TULARE	528	0
ER Hills	Occidental of ER Hills, Inc.	3035653	35.29085159	-119.5010681	5800	L TULARE	529	0
ER Hills	Occidental of ER Hills, Inc.	3035654	35.29082108	-119.5046768	5800	L TULARE	628	0
ER Hills	Occidental of ER Hills, Inc.	3036658	35.30386734	-119.5774002	4606	TULARE/OLIG	673	0
ER Hills	Occidental of ER Hills, Inc.	3036659	35.30383341	-119.5770035	4606	TULARE/OLIG	636	0
ER Hills	Occidental of ER Hills, Inc.	3036660	35.30242538	-119.574791	4606	TULARE/OLIG	631	0
ER Hills	Occidental of ER Hills, Inc.	3036661	35.30269901	-119.5728089	4606	TULARE/OLIG	500	0
ER Hills	Occidental of ER Hills, Inc.	3036662	35.30093765	-119.5733109	4606	TULARE/OLIG	669	0
ER Hills	Occidental of ER Hills, Inc.	3036663	35.29910278	-119.5726242	4606	TULARE/OLIG	625	0
ER Hills	Occidental of ER Hills, Inc.	3039914	35.300833	-119.576979	4606	TULARE/OLIG	783	0
ER Hills	Occidental of ER Hills, Inc.	3039915	35.300728	-119.574868	4606	TULARE/OLIG	747	0
ER Hills	Occidental of ER Hills, Inc.	3039916	35.298449	-119.574655	4606	TULARE/OLIG	586	0
ER Hills	Occidental of ER Hills, Inc.	3041230	35.293983	-119.500286	5800	L TULARE	468	0
ER Hills	Occidental of ER Hills, Inc.	3041231	35.290819	-119.497792	5800	L TULARE	513	0
ER Hills	Occidental of ER Hills, Inc.	3041234	35.304048	-119.579439	4606	TULARE/OLIG	662	0
ER Hills	Occidental of ER Hills, Inc.	3041235	35.302406	-119.57934	4606	TULARE/OLIG	564	0
ER Hills	Occidental of ER Hills, Inc.	3041236	35.300836	-119.579336	4606	TULARE/OLIG	589	0
ER Hills	Occidental of ER Hills, Inc.	3041407	35.293868	-119.510081	5800	L TULARE	598	0
ER Hills	Occidental of ER Hills, Inc.	3041408	35.293722	-119.506358	5800	L TULARE	614	0
ER Hills	Occidental of ER Hills, Inc.	3041409	35.293105	-119.504519	5800	L TULARE	562	0
ER Hills	Occidental of ER Hills, Inc.	3041834	35.296385	-119.500275	5800	L TULARE	558	0
ER Hills	Occidental of ER Hills, Inc.	3041835	35.295815	-119.497248	5800	L TULARE	648	0
ER Hills	Occidental of ER Hills, Inc.	3041836	35.295667	-119.509311	5800	L TULARE	447	0
ER Hills	Occidental of ER Hills, Inc.	3041837	35.295703	-119.506395	5800	L TULARE	600	0
ER Hills	Occidental of ER Hills, Inc.	3041838	35.296266	-119.502516	5800	L TULARE	461	0
ER Hills	Occidental of ER Hills, Inc.	3042354	35.30572	-119.579284	4606	TULARE/OLIG	645	0
ER Hills	Occidental of ER Hills, Inc.	3042355	35.297164	-119.574898	4606	TULARE/OLIG	540	0
ER Hills	Occidental of ER Hills, Inc.	3042356	35.297197	-119.572321	4606	TULARE/OLIG	565	0
ER Hills	Occidental of ER Hills, Inc.	3042798	35.298129	-119.509352	5800	L TULARE	669	0

207 Wells Injecting Into Aquifers that are Reasonably Expected to Supply a Public Water Supply System  
 Category 1 (3,000-10,000 TDS)

FieldName	Operator Name	API Number	Latitude	Longitude	Zone TDS Data	Injection Zone	Top Perf	Number of Water Supply Wells Identified within One Mile Radius
Elk Hills	Occidental of Elk Hills, Inc.	3042799	35.299719	-119.508172	5800	L TULARE	621	0
Elk Hills	Occidental of Elk Hills, Inc.	3042800	35.297932	-119.503276	5800	L TULARE	570	0
Elk Hills	Occidental of Elk Hills, Inc.	3042801	35.298372	-119.500881	5800	L TULARE	485	0
Elk Hills	Occidental of Elk Hills, Inc.	3042802	35.297624	-119.496292	5800	L TULARE	476	0
Elk Hills	Occidental of Elk Hills, Inc.	3043855	35.291488	-119.498161	5800	L TULARE	453	0
Elk Hills	Occidental of Elk Hills, Inc.	3044228	35.30276	-119.509214	4668	TULARE	670	0
Elk Hills	Occidental of Elk Hills, Inc.	3044755	35.300757	-119.500096	5800	L TULARE	530	0
Elk Hills	Occidental of Elk Hills, Inc.	3044756	35.300655	-119.509376	5800	L TULARE	632	0
Elk Hills	Occidental of Elk Hills, Inc.	3044757	35.301086	-119.505693	5800	L TULARE	647	0
Elk Hills	Occidental of Elk Hills, Inc.	3044758	35.298701	-119.505172	5800	L TULARE	567	0
Elk Hills	Occidental of Elk Hills, Inc.	3045138	35.303208	-119.500472	5800	L TULARE	506	0
Elk Hills	Occidental of Elk Hills, Inc.	3045139	35.303142	-119.49735	5800	L TULARE	489	0
Elk Hills	Occidental of Elk Hills, Inc.	3045140	35.300746	-119.497318	5800	L TULARE	540	0
Elk Hills	Occidental of Elk Hills, Inc.	3045141	35.302926	-119.506632	5800	L TULARE	568	0
Elk Hills	Occidental of Elk Hills, Inc.	3045142	35.303338	-119.503414	5800	L TULARE	524	0
Elk Hills	Occidental of Elk Hills, Inc.	3045287	35.294332	-119.517187	5800	L TULARE	543	0
Elk Hills	Occidental of Elk Hills, Inc.	3045288	35.295434	-119.514978	5800	L TULARE	641	0
Elk Hills	Occidental of Elk Hills, Inc.	3045289	35.2931	-119.514978	5800	L TULARE	567	0
Elk Hills	Occidental of Elk Hills, Inc.	3045290	35.29399	-119.512722	5800	L TULARE	608	0
Elk Hills	Occidental of Elk Hills, Inc.	3045327	35.296079	-119.513138	5800	L TULARE	655	0
Elk Hills	Occidental of Elk Hills, Inc.	3045355	35.295534	-119.518722	5800	L TULARE	533	0
Elk Hills	Occidental of Elk Hills, Inc.	3045356	35.293236	-119.518722	5800	L TULARE	485	0
Elk Hills	Occidental of Elk Hills, Inc.	3045357	35.296368	-119.517092	5800	L TULARE	587	0
Elk Hills	Occidental of Elk Hills, Inc.	3045661	35.300518	-119.514105	5800	L TULARE	662	0
Elk Hills	Occidental of Elk Hills, Inc.	3045662	35.298165	-119.514027	5800	L TULARE	661	0
Elk Hills	Occidental of Elk Hills, Inc.	3045663	35.304343	-119.511753	5800	L TULARE	693	1
Elk Hills	Occidental of Elk Hills, Inc.	3045664	35.303071	-119.51171	5800	L TULARE	708	0
Elk Hills	Occidental of Elk Hills, Inc.	3045665	35.300629	-119.511535	5800	L TULARE	679	0
Elk Hills	Occidental of Elk Hills, Inc.	3045666	35.298071	-119.511664	5800	L TULARE	670	0
Elk Hills	Occidental of Elk Hills, Inc.	3045667	35.304481	-119.509312	5800	L TULARE	668	0
Elk Hills	Occidental of Elk Hills, Inc.	3045669	35.304983	-119.504504	5800	L TULARE	494	0
Elk Hills	Occidental of Elk Hills, Inc.	3045673	35.300519	-119.51873	5800	L TULARE	645	0
Elk Hills	Occidental of Elk Hills, Inc.	3045674	35.298006	-119.518569	5800	L TULARE	662	0
Elk Hills	Occidental of Elk Hills, Inc.	3045676	35.302986	-119.516483	5800	L TULARE	677	0
Elk Hills	Occidental of Elk Hills, Inc.	3045732	35.304503	-119.499508	5800	L TULARE	457	0
Elk Hills	Occidental of Elk Hills, Inc.	3053063	35.290127	-119.561656	4606	TULARE/OLIG	713	0
Elk Hills	Occidental of Elk Hills, Inc.	3053135	35.30667	-119.580188	4606	TULARE/OLIG	1082	0
Elk Hills	Occidental of Elk Hills, Inc.	3053136	35.303296	-119.576252	4606	TULARE/OLIG	1175	0
Elk Hills	Occidental of Elk Hills, Inc.	3053138	35.304941	-119.577601	4606	TULARE/OLIG	1176	0
Elk Hills	Occidental of Elk Hills, Inc.	3053139	35.304294	-119.516531	5800	L TULARE	724	1
Elk Hills	Occidental of Elk Hills, Inc.	3053140	35.304323	-119.514121	5800	L TULARE	680	1
Elk Hills	Occidental of Elk Hills, Inc.	3053847	35.303015	-119.514138	5800	L TULARE	678	0
Elk Hills	Occidental of Elk Hills, Inc.	3053848	35.304413	-119.506876	5800	L TULARE	655	0
Elk Hills	Occidental of Elk Hills, Inc.	3053849	35.304862	-119.501641	5800	L TULARE	489	0
Elk Hills	Occidental of Elk Hills, Inc.	3054570	35.325117	-119.559496	4606	TULARE/OLIG	679	0
Elk Hills	Vintage Production California LLC	3054571	35.290661	-119.55946	4606	TULARE/OLIG	728	0
Elk Hills	Occidental of Elk Hills, Inc.	3054572	35.29069	-119.55725	4606	TULARE/OLIG	728	0
Elk Hills	Occidental of Elk Hills, Inc.	3054573	35.290717	-119.555165	4606	TULARE/OLIG	720	0
Jacintos	Holmes Western Oil Corporation	3023231	36.1178055	-120.3749429	UNK	ETCHEGON	1065	2
Lost Hills	Chevron U.S.A. Inc.	3023231	35.614745	-119.741909	4375	TULARE/ETCHEGON	445	0
Lost Hills	Chevron U.S.A. Inc.	3032808	35.611918	-119.739555	4375	TULARE/ETCHEGON	750	0
Lost Hills	Chevron U.S.A. Inc.	3032810	35.608909	-119.737219	4375	TULARE/ETCHEGON	775	0
Lost Hills	Chevron U.S.A. Inc.	3032811	35.607449	-119.735547	4375	TULARE/ETCHEGON	755	0
Lost Hills	Chevron U.S.A. Inc.	3032872	35.605985	-119.735613	4375	TULARE/ETCHEGON	780	0
Lost Hills	Chevron U.S.A. Inc.	3033947	35.613582	-119.740336	4375	TULARE/ETCHEGON	765	0
Lost Hills	Chevron U.S.A. Inc.	3033948	35.610686	-119.737911	4375	TULARE/ETCHEGON	790	0
Lynch Canyon	Eagle Petroleum, LLC	5320795	35.89723562	-120.8465773	3500	Santa Margarita	1275	2
Lynch Canyon	Eagle Petroleum, LLC	5322018	35.99852025	-120.8459847	3500	Santa Margarita	1240	2
McKittrick	Griffin Resources, LLC	2960351	35.323675	-119.662428	6800	TULARE	574	0
Midway-Sunset	Valley Water Management Company	2950031	35.223879	-119.553459	5898	TULARE (UNSATURATED)	500	0
Midway-Sunset	Valley Water Management Company	2952612	35.225566	-119.558521	5898	TULARE (UNSATURATED)	478	0
Midway-Sunset	Vintage Production California LLC	2954269	35.215573	-119.551884	4212	TULARE	536	0
Midway-Sunset	Vintage Production California LLC	2954270	35.215564	-119.549539	4212	TULARE	515	0
Midway-Sunset	Holmes Western Oil Corporation	2964256	35.086174	-119.340074	9590	TULARE	900	0
Midway-Sunset	Holmes Western Oil Corporation	2972262	35.036177	-119.33533	9590	TULARE	1120	0
Midway-Sunset	Valley Water Management Company	2978246	35.227422	-119.554373	5898	TULARE (UNSATURATED)	468	0
Midway-Sunset	Valley Water Management Company	2978248	35.227452	-119.55974	5898	TULARE (UNSATURATED)	441	0
Midway-Sunset	Valley Water Management Company	2978251	35.227151	-119.562583	5898	TULARE (UNSATURATED)	603	1
Midway-Sunset	Valley Water Management Company	2978251	35.227536	-119.557134	5898	TULARE (UNSATURATED)	512	0
Midway-Sunset	Valley Water Management Company	2982555	35.222003	-119.55021	5898	TULARE (UNSATURATED)	399	0
Midway-Sunset	Valley Water Management Company	2982556	35.220419	-119.550391	5898	TULARE (UNSATURATED)	519	0
Midway-Sunset	Valley Water Management Company	2982557	35.22309	-119.547006	5898	TULARE (UNSATURATED)	309	0
Midway-Sunset	Valley Water Management Company	2982558	35.220409	-119.546894	5898	TULARE (UNSATURATED)	556	0
Midway-Sunset	Jaco Production Company	2983271	35.239644	-119.621123	3243	MCDONARDY (SPELACY)	1092	0
Midway-Sunset	Seneca Resources Corporation	2987893	35.02343	-119.298871	4770	TULARE/SAN JOAQUIN	354	0
Midway-Sunset	Holmes Western Oil Corporation	3021169	35.036869	-119.344365	9590	TULARE	955	0
Midway-Sunset	Holmes Western Oil Corporation	3021170	35.036106	-119.332154	9590	TULARE	973	0
Midway-Sunset	Holmes Western Oil Corporation	3024364	35.037909	-119.345669	6888	TULARE	990	0
Midway-Sunset	Valley Water Management Company	3040556	35.23282696	-119.5476972	5898	TULARE (UNSATURATED)	400	0
Midway-Sunset	Valley Water Management Company	3040557	35.23334073	-119.5454219	5898	TULARE (UNSATURATED)	425	0
Midway-Sunset	Linn Operating, Inc.	3048983	35.266894	-119.567778	5898	TULARE	612	0
Midway-Sunset	Linn Operating, Inc.	3048984	35.266275	-119.569763	5898	TULARE	575	0
Midway-Sunset	Linn Operating, Inc.	3048985	35.265894	-119.568479	5898	TULARE	595	0
Midway-Sunset	Linn Operating, Inc.	3048986	35.265067	-119.570257	5898	TULARE	497	0
Midway-Sunset	Linn Operating, Inc.	3048987	35.264647	-119.568801	5898	TULARE	378	0
Midway-Sunset	Linn Operating, Inc.	3048989	35.263375	-119.569211	5898	TULARE	609	0
Midway-Sunset	Linn Operating, Inc.	3048990	35.26502	-119.567714	5898	TULARE	573	0
Midway-Sunset	Linn Operating, Inc.	3048991	35.264332	-119.569843	5898	TULARE	635	0
Midway-Sunset	Linn Operating, Inc.	3048992	35.263857	-119.568372	5898	TULARE	765	0
Midway-Sunset	Linn Operating, Inc.	3051198	35.265647	-119.56755	5898	TULARE	650	0
Midway-Sunset	Linn Operating, Inc.	3051199	35.265144	-119.568352	5898	TULARE	740	0
Midway-Sunset	Linn Operating, Inc.	3051200	35.264861	-119.569447	5898	TULARE	442	0
Midway-Sunset	Linn Operating, Inc.	3051201	35.26372	-119.56945	5898	TULARE	383	0
Midway-Sunset	Linn Operating, Inc.	3051202	35.26441	-119.56777	5898	TULARE	422	0
Midway-Sunset	Valley Water Management Company	3053084	35.222011	-119.547134	5898	TULARE (UNSATURATED)	400	0
Midway-Sunset	Linn Operating, Inc.	3053416	35.263435	-119.569316	5898	TULARE	501	0
Midway-Sunset	Linn Operating, Inc.	3055802	35.263323	-119.568698	5898	TULARE	574	0
Mount Poso	Vintage Production California LLC	2912893	35.592811	-118.962159	4340	Olcose	1440	1
Newhall	Watt Mineral Holdings LLC	5320282	34.9699732	-118.4959848	6000	"Lower Kraft" Zone - Pico (Pliocene) Formation	475	5
San Ardo	Chevron U.S.A. Inc.	5320282	35.97433547	-120.8726857	6692	Auriferous	1475	14
San Ardo	Vintage Production California LLC	5321884	35.98891327	-120.8762411	6300	Santa Margarita	1400	4
Sespe	Seneca Resources Corporation	11102615	34.50944317	-118.883292	4600	Rincon-Vaqueros (Miocene) and Upper Sespe (Oligocene)	930	0
Timber Canyon	Vintage Production California LLC	11104099	34.42359131	-119.0517652	9589	Pico Fm. (Pliocene)	1430	0

**207 Wells Injecting Into Aquifers that are Reasonably Expected to Supply a Public Water Supply System  
Category 1 (3,000-10,000 TDS)**

FieldName	Operator Name	APINumber	Latitude	Longitude	Zone TDS Data	Injection Zone	Top Perf	Number of Water Supply Wells Identified within One Mile Radius
Torrey Canyon	Vintage Production California LLC	11104204	34.37089596	-118.7860283	5832	"102" Zone - Santa Margarita (Miocene) Formation	627	0

Aquifer is reasonably expected to supply a public water system (equivalent to the criteria used to define UIC wells "potentially impacting water supply wells" in Enclosure D)

The top of the injection zone is within 500 vertical feet of a water supply well with a known total depth.

\* APIs 2973297 and 2977806 are injecting into an Aquifer Historically Treated as Exempt (cease injection by December 31, 2016 unless EPA approves an aquifer exemption) and were associated with Information (13267) order issued in August 2014.

# ATTACHMENT 6

Field	Operator According to DOGGR	API #	TDS	Top Perf	Injection Zone	Water Injected 11-2011 to 12-2014	Status	11 Suspect Aquifers?
Kern River	Chevron U.S.A. Inc.	02940729	750	790	Kern River	-	WD	
Kern River	Chevron U.S.A. Inc.	02970045	946	1400	CHANAC/SANTA MARGARITA	3,181,946	WD	Yes
Kern River	Chevron U.S.A. Inc.	02970046	1018	2043	SANTA MARGARITA	702,366	WD	Yes
Kern River	Chevron U.S.A. Inc.	02970047	1018	2112	SANTA MARGARITA	2,185,971	WD	Yes
Kern River	Chevron U.S.A. Inc.	02970048	1018	1560	SANTA MARGARITA	6,430,633	WD	Yes
Kern River	Chevron U.S.A. Inc.	02970049	946	1620	CHANAC/SANTA MARGARITA	5,205,208	WD	Yes
Kern River	Chevron U.S.A. Inc.	02973218	557	1028	Kern River,CHANAC,SANTA MARGARITA	103,391	WD	Ch., S.M. -Yes
Kern River	Chevron U.S.A. Inc.	02975049	1400	965	CHANAC/SANTA MARGARITA	592,841	WD	Yes
Kern River	Chevron U.S.A. Inc.	02976158	946	1510	CHANAC/SANTA MARGARITA	5,475,325	WD	Yes
Kern River	Chevron U.S.A. Inc.	02980256	1018	2182	SANTA MARGARITA	-	WD	Yes
Kern River	Chevron U.S.A. Inc.	02980421	1018	1912	SANTA MARGARITA	148,780	WD	Yes
Kern River	Chevron U.S.A. Inc.	02983163	1018	2128	SANTA MARGARITA	145,206	WD	Yes
Kern River	Chevron U.S.A. Inc.	02983164	1018	1807	SANTA MARGARITA	77,360	WD	Yes
Kern River	Chevron U.S.A. Inc.	02983235	1018	2078	SANTA MARGARITA	1,613	WD	Yes
Kern River	Chevron U.S.A. Inc.	02984592	1018	1486	SANTA MARGARITA	4,654,010	WD	Yes
Kern River	Chevron U.S.A. Inc.	03006705	1018	2015	SANTA MARGARITA	-	WD	Yes
Kern River	Chevron U.S.A. Inc.	03010793	1018	991	SANTA MARGARITA	14,939	WD	Yes

# ATTACHMENT 7

Field	Operator According to DOGGR	API #	Zone TDS	Injection Zone	Water Injected 11-2011 to 12-2014	Top Perf	Water Wells > 1 Mile
Kern River	Chevron U.S.A. Inc.	02973297	3325	Chanac	1,198,280	700	40
Cymric	Chevron U.S.A. Inc.	02979440	7484	TULARE	5,632,519	578	1
Cymric	Chevron U.S.A. Inc.	02986992	7484	TULARE	3,143,495	488	0
Cymric	Chevron U.S.A. Inc.	03015482	7484	Tulare	744,041	542	1
Cymric	Chevron U.S.A. Inc.	03032805	7484	TULARE	945,578	580	0
Cymric	Chevron U.S.A. Inc.	03032806	7484	Tulare	3,281,790	560	1
Cymric	Chevron U.S.A. Inc.	03037968	7484	TULARE	599,481	604	0
Lost Hills	Chevron U.S.A. Inc.	03023231	4375	Tulare/Etchegoin	64,606	445	0
Lost Hills	Chevron U.S.A. Inc.	03032808	4375	Tulare/Etchegoin	678,612	750	0
Lost Hills	Chevron U.S.A. Inc.	03032810	4375	Tulare/Etchegoin	617,928	775	0
Lost Hills	Chevron U.S.A. Inc.	03032811	4375	Tulare/Etchegoin	493,337	755	0
Lost Hills	Chevron U.S.A. Inc.	03032872	4375	Tulare/Etchegoin	614,700	780	0
Lost Hills	Chevron U.S.A. Inc.	03033947	4375	Tulare/Etchegoin	499,537	765	0
Lost Hills	Chevron U.S.A. Inc.	03033948	4375	Tulare/Etchegoin	278,842	790	0

**PROOF OF SERVICE**

I am employed in the County of Los Angeles, State of California. I am over the age of 18 and not a party to the within action. My business address is 43364 10<sup>th</sup> Street West, Lancaster, California 93534. On **July 23, 2015**, I served the within document(s) described as:

**NOTICE OF VIOLATION OF SAFE DRINKING WATER ACT AND  
NOTICE OF INTENT TO FILE SUIT**

on the interested parties in this action as stated below:

**\*\*\*PLEASE SEE ATTACHED SERVICE LIST \*\*\***

**X (BY CERTIFIED MAIL - RETURN RECEIPT REQUESTED)** By placing a true copy of the foregoing document(s) in a sealed envelope addressed as set forth above. I am “readily familiar” with the firm’s practice of collection and processing correspondence for mailing. Under that practice it would be deposited with U. S. postal service on that same day with postage thereon fully prepaid at Lancaster, California in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare that I am employed in the offices of a member of the State Bar of this Court at whose direction the service was made. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on **July 23, 2015**, at Lancaster, California.



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MAGGIE BRAVO

**SERVICE LIST**

<p>Gina McCarthy, Administrator U.S. Environmental Protection Agency Ariel Rios Building, Mail Code 1101A 1200 Pennsylvania Avenue, NW Washington, DC 20460 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0088 2127 50</p>	<p>Jared Blumenfeld, Regional Administrator US EPA, Pacific Southwest, Region 9 75 Hawthorne St. San Francisco, CA 94015 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 16</p>
<p>David Bunn, Director California Department of Conservation 801 K. Street, MS 24-01 Sacramento, CA 95814 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0088 2127 67</p>	<p>Steven Bohlen, State Oil and Gas Supervisor Division of Oil, Gas, and Geothermal Resources 801 K. Street, MS 20-20 Sacramento, CA 95814 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 23</p>
<p>Kamala Harris, California Attorney General Office of the Attorney General 1300 I Street Sacramento, CA 95814-2919 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0088 2127 74</p>	<p>O'MELVENY &amp; MYERS LLP Matthew Kline 1999 Avenue of the Stars, 7<sup>th</sup> Floor Los Angeles, CA 90067 Phone: (310) 246-6840 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 30</p>
<p>O'MELVENY &amp; MYERS LLP Dimitri D. Portnoi 400 South Hope Street, Suite 1435 Los Angeles, CA 90071 Phone: (213) 430-7699 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0088 2127 81</p>	<p>Occidental Petroleum Corporation 110 West 7<sup>th</sup> Street Tulsa, OK 74119 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 47</p>
<p>Occidental Oil and Gas Corporation 110 West 7<sup>th</sup> Street Tulsa, OK 74119 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0088 2129 96</p>	<p>Oxy U.S.A. Inc. 110 West 7<sup>th</sup> Street Tulsa, OK 74119 <b>VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 54</p>

California Resources Corporation 10889 Wilshire Blvd Los Angeles, CA 90024 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 09	California Resources Elk Hills, LLC 10889 Wilshire Blvd Los Angeles, CA 90024 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 61
California Resources Petroleum Corporation 10889 Wilshire Blvd Los Angeles, CA 90024 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 78	CT Corporation System Registered Agent for California Resources Production Corporation 818 W Seventh Street, Suite 930 Los Angeles, CA 90017 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3561 15
CT Corporation System Registered Agent for Occidental Petroleum Corporation 818 W Seventh Street, Suite 930 Los Angeles, CA 90017 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 85	CT Corporation System Registered Agent for Occidental Oil and Gas Corporation 818 W Seventh Street, Suite 930 Los Angeles, CA 90017 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3561 22
CT Corporation System Registered Agent for Oxy U.S.A. Inc. 818 W Seventh Street, Suite 930 Los Angeles, CA 90017 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3560 92	CT Corporation System Registered Agent for California Resources Corporation 818 W Seventh Street, Suite 930 Los Angeles, CA 90017 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3561 39
CT Corporation System Registered Agent for California Resources Elk Hills, LLC 818 W Seventh Street, Suite 930 Los Angeles, CA 90017 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3561 08	CT Corporation System Registered Agent for California Resources Petroleum Corporation 818 W Seventh Street, Suite 930 Los Angeles, CA 90017 <b>VIA CERTIFIED MAIL - RETURN</b> <b>RECEIPT REQUESTED</b> 9171 9690 0935 0099 3561 46